



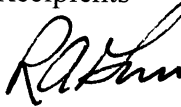
STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

June 24, 2003

NOTICE TO: Invitation to Bid Recipients

FROM: R. A. Garriss, P.E.   
Contract Officer

SUBJECT: Time Change for Bid Openings

Beginning with the July 22, 2003 Special Letting, the bid opening time and deadline for submitting bids to Bid Express will change from 10:00 a.m. to **2:00 p.m.** The deadline for submitting the appropriate proposal form provided by the Department, which includes an executed non-collusion affidavit and bid bond or bid deposit, remains the same. These items shall be delivered in a sealed envelope, with the Contract Number, TIP Number, County and Contractor clearly labeled, to be received no later than 5:00 p.m., the day prior to bid opening.

If you have any questions, please contact Kim Canady at (919) 250-4124 or e-mail her at [klcanady@dot.state.nc.us](mailto:klcanady@dot.state.nc.us).

**MAILING ADDRESS:**  
NC DEPARTMENT OF TRANSPORTATION  
DESIGN SERVICES UNIT  
1591 MAIL SERVICE CENTER  
RALEIGH NC 27699-1591

TELEPHONE: 919-250-4124  
FAX: 919-250-4127  
**WEBSITE:** [WWW.DOH.DOT.STATE.NC.US](http://WWW.DOH.DOT.STATE.NC.US)

**LOCATION:**  
CENTURY CENTER COMPLEX  
ENTRANCE B15  
1020 BIRCH RIDGE DRIVE  
RALEIGH NC 27610




STATE OF NORTH CAROLINA  
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June 17, 2003

NOTICE TO: Plan Holders

FROM: R. A. Garriss, P.E.   
Contract Officer

SUBJECT: Delays in Billing

Please be advised that invoices for April, May and June plans and proposals have not been mailed. The Department has been transitioning to a new financial system, and as a result, are experiencing delays in billing. Once the new system becomes stable, and we are able to invoice, you will receive invoices for all orders placed since April 2003. We apologize for any inconvenience that this may cause.

If you have any questions, please contact Kim Canady at (919) 250-4124 or e-mail her at [klcanady@dot.state.nc.us](mailto:klcanady@dot.state.nc.us).

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March 18, 2003

MEMORANDUM TO: Electronic Bidders

FROM: R. A. Garriss, P. E.   
Contract Officer

SUBJECT: Upgrade to Expedite 5.1a

Please be advised that effective with the March 18<sup>th</sup>, 2003 bid letting, North Carolina Department of Transportation will be upgrading from Expedite 4.3b to Expedite 5.1a. These two versions of software are not backward compatible, meaning files generated in one version can not be opened in the other version. So, the timing and upgrade of this software on your part is extremely critical in submitting bids to North Carolina for March 2003 and forward.

This new version of software is available for download from either the NC Department of Transportation or the Bid Express web site. The links are listed below. Before upgrading your software, please ensure you have backed up your Digital ID. If you have not done so, this can be accomplished through the Tools menu under Digital ID's. It is recommended that you then uninstall the Expedite 4.3b version to ensure no confusion in the future. Once you have installed Expedite 5.1a, you need to enter your Bidder Information and Agency ID. The digital ID backup file you created in the previous version will also need to be imported back in through the Tools menu under Digital ID's. If you do not feel comfortable with any part of this procedure, please do not hesitate to contact the Bid Express helpdesk at (352) 381-4888, to have them walk you through this upgrade. The staff in Design Services Contract Office is also available for any further questions you may have concerning this transition.

Bid Express  
<http://www.bidx.com>

NC Department of Transportation  
[http://www.doh.dot.state.nc.us/preconstruct/highway/dsn\\_srvc/contracts/expedi/](http://www.doh.dot.state.nc.us/preconstruct/highway/dsn_srvc/contracts/expedi/)

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LOCATION:  
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**STATE OF NORTH CAROLINA**  
**DEPARTMENT OF TRANSPORTATION**  
**INVITATION TO BID**

ELECTRONIC BIDS FOR THE CONSTRUCTION OF THE FOLLOWING PROJECTS WILL BE PUBLICLY READ IN ROOM 156-A/B, THE DESIGN SERVICES LARGE CONFERENCE ROOM, LOCATED IN BUILDING B AT 1020 BIRCH RIDGE DRIVE, RALEIGH, N.C. AT **2:00PM ON JULY 22, 2003**. NO ELECTRONIC BIDS WILL BE RECEIVED AFTER 2:00PM.

BIDS SHALL BE SUBMITTED IN ACCORDANCE WITH THE SPECIAL PROVISION TITLED "ON-LINE ELECTRONIC BIDDING" CONTAINED IN EACH PROPOSAL FORM.

THE BIDDER SHALL FURNISH A NON-COLLUSION AFFIDAVIT FOR EACH BID. AFFIDAVIT FORMS WILL BE INCLUDED IN THE PROPOSAL AS PART OF THE SIGNATURE SHEETS.

A BID BOND OR BID DEPOSIT IN THE AMOUNT OF 5% OF THE TOTAL AMOUNT BID WILL BE REQUIRED. THE BIDDER SHALL USE THE STANDARD BID BOND FORM OF THE DEPARTMENT OF TRANSPORTATION, UNLESS HE ELECTS TO FURNISH A BID DEPOSIT. COPIES OF THIS BOND FORM WILL BE ENCLOSED WITH EACH PROPOSAL FORM. ADDITIONAL BOND FORMS MAY BE OBTAINED FROM THE RALEIGH OFFICE. (PHONE - 919-250-4124).

THE MINIMUM WAGE FOR LABOR WILL BE SHOWN IN THE PROPOSAL FORM FOR FEDERAL AID PROJECTS.

**CONTRACTOR'S LICENSE:** A GENERAL CONTRACTOR'S LICENSE IS REQUIRED IN ORDER TO SUBMIT A BID ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000.00 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. FOR ADDITIONAL INFORMATION OR TO MAKE APPLICATION FOR A LICENSE, APPLY TO THE EXECUTIVE SECRETARY OF THE CONTRACTOR LICENSING BOARD, P.O. BOX 17187, RALEIGH, NC 27619, (919-571-4183).

**STATE PRIVILEGE LICENSE TAXES:** CONTRACTORS WHO BID UPON AND/OR ARE AWARDED NORTH CAROLINA HIGHWAY CONSTRUCTION PROJECTS ARE SUBJECT TO CONTRACTOR BIDDERS AND/OR CONTRACTOR PROJECT PRIVILEGE LICENSE TAXES UNDER G.S. 105-54 OF THE STATE REVENUE LAWS. FOR INFORMATION, WRITE TO THE NORTH CAROLINA DEPARTMENT OF REVENUE, LICENSE AND EXCISE TAX DIVISION, P.O. BOX 25000, RALEIGH, NC 27640, OR CALL 919-733-3673.

**PREQUALIFYING TO BID:** ALL PROSPECTIVE BIDDERS SHALL BE PREQUALIFIED WITH THE DEPARTMENT OF TRANSPORTATION PRIOR TO SUBMITTING A BID. CONTRACTORS WHO ARE NOT PREQUALIFIED MAY OBTAIN INFORMATION AND FORMS FOR PREQUALIFYING FROM THE MANAGER OF CONSTRUCTION, DIVISION OF HIGHWAYS, DEPARTMENT OF TRANSPORTATION, 1543 MAIL SERVICE CENTER, RALEIGH, N. C., 27699-1543. ALL REQUIRED PREQUALIFICATION STATEMENTS AND DOCUMENTS SHALL BE FILED WITH THE MANAGER OF CONSTRUCTION AT LEAST TWO WEEKS PRIOR TO THE DATE OF OPENING BIDS.

THE DEPARTMENT OF TRANSPORTATION HEREBY NOTIFIES ALL BIDDERS THAT IT WILL AFFIRMATIVELY INSURE THAT IN ANY CONTRACT ENTERED INTO PURSUANT TO THIS INVITATION TO BID, MINORITY BUSINESS ENTERPRISES WILL BE AFFORDED FULL OPPORTUNITY TO SUBMIT BIDS IN RESPONSE TO THIS INVITATION AND WILL NOT BE DISCRIMINATED AGAINST ON THE GROUNDS OF RACE, COLOR, SEX, OR NATIONAL ORIGIN IN COMPENSATION TO THIS AWARD.

PROPOSAL FORMS AT **\$25.00** EACH, PLANS (SMALL SIZE) AT **\$40.00** PER SET, PLANS (LARGE SIZE) AT **\$100.00** PER SET, AND CROSS-SECTIONS AT **\$40.00** PER SET, PLUS SALES TAX FOR N.C. RESIDENTS, MAY BE OBTAINED BY TELEPHONING (919-250-4124), FAXING (919-250-4127), OR WRITING TO : PLANS AND PROPOSALS, DESIGN SERVICES UNIT, DEPARTMENT OF TRANSPORTATION, 1591 MAIL SERVICE CENTER, RALEIGH, N.C., 27699-1591. THESE CHARGES ARE NOT DEPOSITS AND WILL NOT BE REFUNDED. ALL ORDERS FOR PROPOSAL FORMS, PLANS AND CROSS-SECTIONS DELIVERED IN NORTH CAROLINA ARE SUBJECT TO 7% SALES TAX. ORDERS MAILED TO OUT OF STATE CONTRACTORS ARE NOT SUBJECT TO SALES TAX. MAKE ALL CHECKS PAYABLE TO THE **"N.C. DEPARTMENT OF TRANSPORTATION"**.

THE RIGHT IS RESERVED TO REJECT ANY OR ALL BIDS.

**TODAY'S DATE IS JUNE 24, 2003.**  
**BY ORDER OF THE DEPARTMENT OF TRANSPORTATION**  
**(THE WORK WILL CONSIST APPROXIMATELY AS SHOWN ON THE FOLLOWING SHEETS)**

### **REVIEW OF PLANS AND PROPOSALS IN DIVISION OFFICE**

IN ORDER TO FACILITATE AND ENCOURAGE THE INVOLVEMENT OF MINORITY BUSINESS ENTERPRISES IN THE HIGHWAY CONSTRUCTION PROCESS, IT IS THE POLICY OF THE DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, THAT A SET OF PLANS AND PROPOSAL FOR EACH PROJECT TO BE LET WILL BE MAINTAINED FOR REVIEW BY ANY CONTRACTOR INTERESTED IN BIDDING UPON OR QUOTING WORK IN AN ADVERTISED PROJECT.

THE PROPOSALS AND PLANS WILL BE AVAILABLE FOR REVIEW BEGINNING TWO WEEKS PRIOR TO THE DATE OF BID OPENING IN THE DIVISION OFFICE WHICH WILL ADMINISTER THE CONTRACT. THE DEPARTMENT WILL, UPON REQUEST, MAKE AVAILABLE FROM ITS STAFF A PERSON TO EXPLAIN THE PROPOSED PROJECT AND TO ANSWER GENERAL QUESTIONS RELATING TO THE PROJECT. THE PLANS AND PROPOSALS CAN BE REVIEWED ANY TIME MONDAY THRU FRIDAY, EXCLUDING HOLIDAYS, BETWEEN THE HOURS OF 8:00 A.M. AND 4:30 P.M. IN THE DIVISION OFFICE. IN ORDER TO HAVE A MEMBER OF THE STAFF EXPLAIN THE PROJECT AND/OR ANSWER GENERAL QUESTIONS PERTAINING TO THE PROJECT, PRIOR APPOINTMENTS MUST BE MADE BY CALLING THE APPROPRIATE DIVISION OFFICE.

FOLLOWING ARE THE LOCATIONS AND TELEPHONE NUMBERS OF THE OFFICES IN WHICH THE PLANS AND PROPOSALS WILL BE MADE AVAILABLE, REFERENCE SHOULD BE MADE TO THE SHEETS CONTAINING THE INDIVIDUAL PROJECT QUANTITIES TO DETERMINE WHICH DIVISION OFFICE WILL ADMINISTER THE CONTRACT.

<b><u>DIV NO.</u></b>	<b><u>DIVISION ENGINEER</u></b>	<b><u>LOCATION</u></b>	<b><u>TOWN</u></b>	<b><u>TELEPHONE</u></b>
00001	D. R. Conner	113 AIRPORT DRIVE	EDENTON	(252) 482-7977
00002	C. E. Lassiter, Jr.	105 PACTOLUS ROAD	GREENVILLE	(252) 830-3490
00003	H. A. Pope	124 DIVISION DRIVE	WILMINGTON	(910) 251-5724
00004	Anthony W. Roper , PE	509 WARD BOULEVARD	WILSON	(252) 237-6164
00005	J. G. Nance	2612 NORTH DUKE STREET	DURHAM	(919) 560-6851
00006	T. R. Gibson	558 GILLESPIE STREET	FAYETTEVILLE	(910) 486-1493
00007	J. M. Mills	1534 YANCEYVILLE STREET	GREENSBORO	(336) 334-3192
00008	W. F. Rosser	902 N. SANDHILLS BOULEVARD	ABERDEEN	(910) 944-2344
00009	S. P. Ivey	2125 CLOVERDALE AVENUE	WINSTON-SALEM	(336) 631-1340
00010	B. G. Payne	716 WEST MAIN STREET	ABLEMARLE	(704) 982-0101
00011	R. C. McCann	NC-115 WEST	NORTH WILKESBORO	(336) 667-9111
00012	M. L. Holder	1710 EAST MARION STREET	SHELBY	(704) 480-5400
00013	J. J. Swain	55 ORANGE STREET	ASHEVILLE	(828) 251-6171
00014	R. G. Watson	253 WEBSTER ROAD	SYLVA	(828) 586-2141

===== SUMMARY OF PROPOSALS =====

**Bid Letting Number** L030722

<b>RPN</b>	<b>Contract Id</b>	<b>WBS</b>	<b>County</b>	<b>Length</b>	<b>JobType</b>
001	C200692	34365.3.41	WAKE	5.961 KM	GRADING, DRAINAGE, PAVING & STRUCTURES.
002	C200691	34365.3.40	WAKE	5.729 KM	GRADING, DRAINAGE, PAVING & STRUCTURES.
003	C200869	34365.3.40 ETC.	WAKE	11.690 KM	GRADING, DRAINAGE, PAVING, SIGNING, SIGNALS & STRUCTURES.
004	C200739	34398.3.10	MONTGOMERY, RICHMOND	6.925 KM	WIDENING, GRADING, DRAINAGE, PAVING & STRUCTURES.
005	C200279	34398.3.11	MONTGOMERY	4.446 KM	WIDENING, GRADING, DRAINAGE, PAVING & STRUCTURES.
006	C200874	34398.3.10 ETC.	MONTGOMERY, RICHMOND	11.371 KM	WIDENING, GRADING, DRAINAGE, PAVING & STRUCTURES.
007	C200738	34398.3.8	RICHMOND	5.945 KM	GRADING, DRAINAGE, PAVING & STRUCTURES.
008	C200280	34398.3.9	RICHMOND	10.382 KM	GRADING, DRAINAGE, PAVING & STRUCTURES.
009	C200873	34398.3.8 ETC.	RICHMOND	16.327 KM	GRADING, DRAINAGE, PAVING, SIGNALS, & STRUCTURES.

**FEDERAL AID PROPOSAL, CONTRACTOR LICENSE NOT REQUIRED TO BID****L030722 001****CONTRACT ID : C200692 34365.3.41****DIV OFFICE DURHAM****LENGTH = 5.961 KM****COUNTY : WAKE****GRADING, DRAINAGE, PAVING & STRUCTURES.****DBE GOAL 10.0% COMPLETION DATE : APR 15 2006****I-540 (NORTHERN WAKE EXPRESSWAY) FROM SOUTH OF SR-2215 (BUFFALOE RD) TO US-64 EAST OF KNIGHTDALE.**

ROADWAY ITEMS						
			10.8	M	600MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	
			33.6	M	800MM BIT COAT CS PIPE CULVERTS, TYPE B 2.01MM THICK	
Lump Sum	LS	MOBILIZATION	20.4	M	900MM BIT COAT CS PIPE CULVERTS, TYPE B 2.01MM THICK	
Lump Sum	LS	CONSTRUCTION SURVEYING	22	EA	400MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK	
Lump Sum	LS	CLEARING & GRUBBING ... HEC-TARE(S)	8	EA	450MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK	
2	HA	SUPPLEMENTARY CLEARING & GRUBBING	2	EA	600MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK	
7	EA	SEALING ABANDONED WELLS	324.8	M	PIPE REMOVAL	
1,256,000	M3	UNCLASSIFIED EXCAVATION	5	EA	PIPE CLEAN-OUT	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (12+99.50)	350	M2	150MM SLOPE PROTECTION	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (16+53.916)	Lump Sum	LS	FINE GRADING	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (445+88.00-LT)	1,000	MTN	STABILIZER AGGREGATE	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (445+88.00-RT)	38,100	MTN	AGGREGATE BASE COURSE	
8,000	M3	UNDERCUT EXCAVATION	80	MTN	INCIDENTAL STONE BASE	
2,400	MTN	CLASS IV SUBGRADE STABILIZATION	20,585	M3	SHOULDER BORROW	
8,290	M3	DRAINAGE DITCH EXCAVATION	11,700	L	PRIME COAT	
9,000	M2	REMOVAL OF EXISTING ASPHALT PAVEMENT	4,130	M2	INCIDENTAL MILLING	
1,150	M2	BREAKING OF EXISTING ASPHALT PAVEMENT	26,900	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0B	
72	HR	PROOF ROLLING	22,600	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0C	
4,025	M3	SELECT GRANULAR MATERIAL	670	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	
4,000	M2	FABRIC FOR SOIL STABILIZATION	20,100	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	
500	M2	TEMPORARY SHORING	11,775	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	
285	M2	GENERIC GRADING ITEM	12,750	MTN	ASPHALT CONC SURFACE COURSE, TYPE S12.5C	
		ROCK PLATING	3,760	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22	
535	MTN	SELECT MATERIAL, CLASS II	705	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 70-22	
2,250	MTN	FOUNDATION CONDITIONING MATERIAL, MINOR STRS	50	MTN	ASPHALT PLANT MIX PAVEMENT REPAIR	
93.6	M	375MM SIDE DRAIN PIPE	131,090	M2	***MM PORT CEM CONC PAVEMENT, THROUGH LANES (WITH DOWELS) (300MM)	
2,526	M	375MM RC PIPE CULVERTS, CLASS III	6,810	M2	***MM PORT CEM CONC PAVEMENT, MISCELLANEOUS (WITHOUT DOWELS) (300MM)	
851.2	M	450MM RC PIPE CULVERTS, CLASS III	Lump Sum	LS	SURFACE TESTING CONCRETE PAVEMENT	
1,395.6	M	600MM RC PIPE CULVERTS, CLASS III	70,430	M2	CONCRETE SHOULDERS ADJACENT TO ***MM PAVEMENT (300MM)	
1,172.4	M	750MM RC PIPE CULVERTS, CLASS III	Lump Sum	LS	FIELD LABORATORY RENTAL, PORT CEM CONC PAVEMENT	
284.4	M	900MM RC PIPE CULVERTS, CLASS III	163	EA	RIGHT OF WAY MARKERS	
109.2	M	1050MM RC PIPE CULVERTS, CLASS III	3,726	M3	SUBDRAIN EXCAVATION	
48	M	1200MM RC PIPE CULVERTS, CLASS III	1,863	M3	SUBDRAIN FINE AGGREGATE	
64.8	M	1350MM RC PIPE CULVERTS, CLASS III	4,500	M	100MM PERFORATED SUBDRAIN PIPE	
15.6	M	1650MM RC PIPE CULVERTS, CLASS III	450	EA	100MM SUBDRAIN PIPE WYES, TEES, & ELBOWS	
122.4	M	****MM RC PIPE CULVERTS, CLASS IV (900MM)	30	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET	
216	M	150MM CS PIPE CULVERTS, 1.63MM THICK (SPRING BOX)	60	M	100MM OUTLET PIPE (SUBDRAINS)	
30	M	400MM CS PIPE CULVERTS, 1.63MM THICK	20,600	M	SHOULDER DRAIN	
39.6	M	600MM CS PIPE CULVERTS, 1.63MM THICK	20,600	M	100MM SHOULDER DRAIN PIPE	
20.4	M	800MM CS PIPE CULVERTS, 2.01MM THICK	2,150	M	100MM OUTLET PIPE (SHOULDER DRAINS)	
248.4	M	400MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	100	EA	CONCRETE PAD FOR SHOULDER DRAIN PIPE OUTLET	
82.8	M	450MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	18.4	M3	ENDWALLS	
			3.8	M3	REINFORCED ENDWALLS	
			0.29	M3	PIPE COLLARS	
			0.36	M3	PIPE PLUGS	
			140	EA	MASONRY DRAINAGE STRUCTURES	



			17	EA	SIGN ERECTION, TYPE *** (OVER-HEAD) (A)
7.37	M3	MASONRY DRAINAGE STRUCTURES	7	EA	SIGN ERECTION, TYPE *** (OVER-HEAD) (B)
33.171	M	MASONRY DRAINAGE STRUCTURES	3	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (A)
6	EA	FRAME WITH GRATE, STD 840.22	4	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (B)
16	EA	FRAME WITH TWO GRATES, STD 840.**** (840.20)	30	EA	SIGN ERECTION, MILEMARKERS
1	EA	FRAME WITH TWO GRATES, STD 840.16	1	EA	RELOCATE SIGN, TYPE ***** (D)
94	EA	FRAME WITH TWO GRATES, STD 840.22	3	EA	RELOCATE SIGN, TYPE ***** (E)
2	EA	FRAME WITH TWO GRATES, STD 840.24	3	EA	DISPOSAL OF SIGN SYSTEM, STEEL BEAM
3	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	39	EA	DISPOSAL OF SIGN SYSTEM, U-CHANNEL
3	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	3	EA	DISPOSAL OF SUPPORT, U-CHANNEL
7	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN BENCH TEST UNIT
3	EA	STEEL FRAME WITH TWO GRATES, STD 840.37	Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN MAIN- TENANCE TRAINING
384	M	750MM CONCRETE CURB & GUTTER	Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM DESIGN APPROVAL TESTS
940	M	SHOULDER BERM GUTTER	Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM INTEGRATION
490	M	CONCRETE EXPRESSWAY GUTTER	Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM NTCIP ACCEPTANCE TESTS
18.4	M2	150MM CONCRETE DRIVEWAY	Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FACTORY TESTS
127	M2	100MM CONCRETE PAVED DITCH	Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FIELD TESTS
1,310	M2	125MM MONOLITHIC CONCRETE IS- LANDS (SURFACE MOUNTED)	Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (F)
115	M	PRECAST REINFORCED CONCRETE BARRIER, SINGLE FACED	Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (I)
14	EA	IMPACT ATTENUATOR UNIT, TYPE 350	Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (J)
5,273.04	M	STEEL BM GUARDRAIL	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN ASSEMBLY (DMS-4)
34.29	M	STEEL BM GUARDRAIL, SHOP CURVED	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN SYSTEM (DMS-3)
8	EA	STEEL BM GUARDRAIL TERMINAL SECTIONS	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN SYSTEM (DMS-4)
10	EA	ADDITIONAL GUARDRAIL POSTS	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (A)
8	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (B-77)	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (B)
16	EA	GUARDRAIL ANCHOR UNITS, TYPE CAT-1	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (C)
12	EA	GUARDRAIL ANCHOR UNITS, TYPE III	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (D)
24	EA	GUARDRAIL ANCHOR UNITS, TYPE 350	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (F)
2	EA	GUARDRAIL ANCHOR UNITS, TYPE M-350	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (G)
130	M	REMOVE EXISTING GUARDRAIL	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (H)
53.34	M	TEMPORARY STEEL BM GUARDRAIL	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (I)
1	EA	GUARDRAIL ANCHOR UNITS, TYPE 350 TEMPORARY	Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (J)
5,286.06	M	CABLE GUIDERAIL	74	M2	WORK ZONE SIGNS (STATIONARY)
24	EA	CABLE GUIDERAIL ANCHOR UNITS	66	M2	WORK ZONE SIGNS (PORTABLE)
12,525	M	WOVEN WIRE FENCE, 1200MM FAB- RIC	28	M2	WORK ZONE SIGNS (BARRICADE MOUNTED)
2,422	EA	100MM TIMBER FENCE POSTS, 2.30M LONG	2	EA	FLASHING ARROW PANELS, TYPE C
950	EA	125MM TIMBER FENCE POSTS, 2.50M LONG	2	EA	CHANGEABLE MESSAGE SIGNS
600	M	ADDITIONAL BARBED WIRE	4	EA	WARNING FLAG SETS
450	MTN	PLAIN RIP RAP, CLASS I	160	EA	DRUMS
1,265	MTN	PLAIN RIP RAP, CLASS II	50	EA	CONES
1,354	MTN	PLAIN RIP RAP, CLASS B	78	M	BARRICADES (TYPE III)
9,750	M2	FILTER FABRIC FOR DRAINAGE			
2	EA	PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON			
104	MTN	GENERIC EROSION CONTROL ITEM BOULDERS			
2	M3	REINFORCED CONCRETE SIGN FOOT- INGS			
1	M3	PLAIN CONCRETE SIGN FOOTINGS			
1,001	KG	SUPPORTS, BREAKAWAY STEEL BEAM			
289	KG	SUPPORTS, SIMPLE STEEL BEAM			
541	M	SUPPORTS, 4.5KG STEEL U-CHANNEL			
6	EA	SUPPORTS, 3KG STEEL U-CHANNEL			
8	EA	SIGN ERECTION, TYPE D			
59	EA	SIGN ERECTION, TYPE E			
3	EA	SIGN ERECTION, TYPE F			

			69	M	FILL OR REMOVE ABANDONED 400MM PIPE, ***** (DI WATER)
720	HR	FLAGGER	209	M	***MM STEEL ENCASEMENT PIPE, ***MM THICK, BY OPEN CUT (500MM, 6.25MM)
10	EA	WARNING LIGHTS (TYPE B)	58	M	***MM STEEL ENCASEMENT PIPE, ***MM THICK, BY OPEN CUT (750MM, 9.525MM)
4	EA	TEMPORARY CRASH CUSHIONS	1	EA	GENERIC UTILITY ITEM REMOVE AND STOCKPILE EXISTING FIRE HYDRANT
3	EA	RESET TEMPORARY CRASH CUSHIONS	4	EA	GENERIC UTILITY ITEM REMOVE EXISTING BLOWOFF
2	EA	TRUCK MOUNTED IMPACT ATTENUATOR (45 MPH)	7,500	M	TEMPORARY SILT FENCE
352	M	PORTABLE CONCRETE BARRIER	625	MTN	STONE FOR EROSION CONTROL, CLASS A
391	M	PORTABLE CONCRETE BARRIER (ANCHORED)	22,500	MTN	STONE FOR EROSION CONTROL, CLASS B
352	M	PORTABLE CONCRETE BARRIER (DRAINAGE)	11,500	MTN	SEDIMENT CONTROL STONE
375	M	RESET PORTABLE CONCRETE BARRIER	69.5	HA	TEMPORARY MULCHING
48	HR	POLICE	3,875	KG	SEED FOR TEMPORARY SEEDING
113	EA	TUBULAR MARKERS (FIXED)	31.25	MTN	FERTILIZER FOR TEMPORARY SEEDING
399	M	REMOVABLE TAPE PAVEMENT MARKING LINES (100MM)	700	M	TEMPORARY SLOPE DRAINS
314	EA	TEMPORARY RAISED PAVEMENT MARKERS	50	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS
13,878	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 2.3MM)	95,500	M3	SILT EXCAVATION
5,779	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 3.1MM)	6,000	M2	SYNTHETIC ROVING
1,199	M	THERMOPLASTIC PAVEMENT MARKING LINES (200MM, 2.3MM)	15,000	M2	MATTING FOR EROSION CONTROL
216	M	THERMOPLASTIC PAVEMENT MARKING LINES (600MM, 3.1MM)	250	M2	PERMANENT SOIL REINFORCEMENT MAT
96	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (2.3MM)	600	M	6.4MM HARDWARE CLOTH
1,316	M	COLD APPLIED PLASTIC PAVEMENT MARKING LINES (100MM)	100	M	***MM TEMPORARY PIPE (450MM)
10	M	COLD APPLIED PLASTIC PAVEMENT MARKING LINES (600MM)	3	EA	***X***X***MM PERFORATED CS PIPE TEE RISER, 1.63MM THICK (800MM X 800MM X 800MM)
4	EA	COLD APPLIED PLASTIC PAVEMENT MARKING SYMBOL	710	M3	STILLING BASINS
22,012	M	PAINT PAVEMENT MARKING LINES (100MM)	48	EA	SPECIAL STILLING BASINS
9,386	M	PAINT PAVEMENT MARKING LINES (150MM)	92	HA	SEEDING & MULCHING
1,092	M	PAINT PAVEMENT MARKING LINES (200MM)	37.5	HA	MOWING
308	M	PAINT PAVEMENT MARKING LINES (600MM)	825	KG	SEED FOR REPAIR SEEDING
84	EA	PAINT PAVEMENT MARKING SYMBOL	2.75	MTN	FERTILIZER FOR REPAIR SEEDING
833	M	REMOVAL OF PAVEMENT MARKING LINES (100MM)	2,600	KG	SEED FOR SUPPLEMENTAL SEEDING
43,907	M	GENERIC PAVEMENT MARKING ITEM 150MM POLYUREA PAVEMENT MARKING LINES	155	MTN	FERTILIZER TOPDRESSING
1,700	M	GENERIC PAVEMENT MARKING ITEM 300MM POLYUREA PAVEMENT MARKING LINES	1.1	HA	SPECIALIZED SEEDING UNDER GUIDERAIL & GUARDRAIL (CENTIPEDE)
20	EA	GENERIC PAVEMENT MARKING ITEM POLYUREA PAVEMENT MARKING SYMBOLS	120	M	IMPERVIOUS DIKE
1,014	EA	PERMANENT RAISED PAVEMENT MARKERS	60	HR	SPECIALIZED HAND MOWING
95	EA	FLEXIBLE DELINEATORS (CRYSTAL)	32	EA	RESPONSE FOR EROSION CONTROL
48	EA	FLEXIBLE DELINEATORS (YELLOW)	450	M3	CULVERT DIVERSION CHANNEL
20	EA	FLEXIBLE DELINEATORS (CRYSTAL & RED)	6	HA	REFORESTATION
20	EA	FLEXIBLE DELINEATORS (YELLOW & RED)	2,195	M	SIGNAL CABLE
9	EA	OBJECT MARKERS (END OF ROAD)	55	EA	VEHICLE SIGNAL HEAD (300MM, 3 SECTION)
147	MTN	FOUNDATION CONDITIONING MATERIAL, UTILITIES CLASS ***** (VI)	10	EA	VEHICLE SIGNAL HEAD (300MM, 5 SECTION)
147	MTN	BEDDING MATERIAL, UTILITIES CLASS ***** (VI)	34	EA	BACKPLATE
5	MTN	PAVEMENT REPAIR FOR UTILITY WORK	1,436	M	MESSENGER CABLE (6.35MM)
270	M	***MM DI WATER PIPE, CLASS ***** WP (400MM, 50, 2.41MPA)	1,310	M	MESSENGER CABLE (9.52MM)
131	M	300MM DI WATER PIPE, CLASS ***** WP (50, 2.41MPA)	13,920	M	TRACER WIRE
14	M	150MM DI WATER PIPE, PC 2.41MPA	1,242	M	TRENCHING (UNPAVED)
241	M	400MM DI WATER PIPE, PC ***MPA (2.41MPA)	25	M	DIRECTIONAL DRILL POLYETHYLENE CONDUIT, 31.75MM (** CONDUIT) (2)
2,510	KG	DUCTILE IRON WATER PIPE FITTINGS, 1.72MPA MIN WP	1,551	M	DIRECTIONAL DRILL OUTER-DUCT CONDUIT, 125MM
1	EA	RELOCATE EXISTING FIRE HYDRANT	892	M	TRENCH MULTI-DUCT, 31.75MM (** CONDUIT) (4)
			1,618	M	MULTI-DUCT, 31.75MM IN OUTER-DUCT (** CONDUIT) (4)
			25	EA	JUNCTION BOX (STANDARD SIZE)
			100	EA	JUNCTION BOX (OVER-SIZED)
			11	EA	JUNCTION BOX (OVER-SIZED, HEAVY DUTY)
			10	EA	WOOD POLE
			17	EA	GUY ASSEMBLY
			5	EA	50MM RISER WITH WEATHERHEAD
			10	EA	50MM RISER WITH HEAT SHRINK TUBING
			1,440	M	INDUCTIVE LOOP SAWCUT
			4,440	M	LEAD-IN CABLE

**CULVERT ITEMS**

3	EA	MICROWAVE VEHICLE DETECTOR	Lump Sum	LS	CULVERT EXCAVATION, STA *****
1,767	M	COMMUNICATIONS CABLE (**FIBER)			(442+07.500 -L-)
12,614	M	COMMUNICATIONS CABLE (**FIBER)	Lump Sum	LS	CULVERT EXCAVATION, STA *****
		(72)			(457+00.00 -L-)
12	EA	AERIAL SPLICE ENCLOSURE	482	MTN	FOUNDATION CONDITIONING MATERIAL, BOX CULVERT
18	EA	INTERCONNECT CENTER	692.1	M3	CLASS A CONCRETE (CULVERT)
7	EA	FIBER-OPTIC TRANSCIEVER	58,252	KG	REINFORCING STEEL (CULVERT)
68	EA	DELINEATOR MARKER			
2	EA	FURNISH FIBER-OPTIC TRANSCIEVER			
24	EA	METAL STRAIN SIGNAL POLE			
24	EA	METAL SIGNAL POLE FOUNDATION			
2	EA	METAL STRAIN POLE DESIGN	Lump Sum	LS	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS AT STA *****
35	EA	SIGN FOR SIGNALS			(445+88.000 -L-LT)
5	EA	SIGNAL CABINET FOUNDATION	Lump Sum	LS	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS AT STA *****
2	EA	CABINET BASE ADAPTER			(445+88.000 -L-RT)
3	EA	CONTROLLER WITH CABINET (TYPE 170E, BASE MOUNTED)	Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION *****
49	EA	DETECTOR CHANNEL (TYPE 170)			(1,437+50.704 -L-)
2	EA	CONTROLLER WITH CABINET (TYPE 2070L, BASE MOUNTED)	Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION *****
12	EA	DETECTOR CHANNEL (TYPE 2070L)			(1,465+66.727 -L-)
5	EA	DETECTOR CHANNEL (NEMA TS-2)	Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION *****
1	EA	NOTEBOOK COMPUTER			(1,465+66.727 -L-)
6	EA	GENERIC SIGNAL ITEM CCTV ASSEMBLY	115.1	M	*****MM DIA DRILLED PIERS IN SOIL (1372MM)
6	EA	GENERIC SIGNAL ITEM CCTV CAMERA WOOD POLE (15.2M)	70.5	M	*****MM DIA DRILLED PIERS NOT IN SOIL (1372MM)
5	EA	GENERIC SIGNAL ITEM FIBER OPTIC DATA TRANSCIEVER (SINGLE FIBER)	67.5	M	PERMANENT STEEL CASING FOR *****MM DRILLED PIER (1372MM)
7	EA	GENERIC SIGNAL ITEM FIBER OPTIC DIGITAL VIDEO RECEIVERS/DATA TRANSMITTERS	6	EA	CROSSHOLE SONIC LOGGING
7	EA	GENERIC SIGNAL ITEM FIBER OPTIC DIGITAL VIDEO TRANSMITTERS/DATA RECEIVERS	815.6	M	CSL TUBES
1	EA	GENERIC SIGNAL ITEM FURNISH FIBER OPTIC DATA TRANSCIEVER (SINGLE FIBER)	8,748.6	M2	REINFORCED CONCRETE DECK SLAB
1	EA	GENERIC SIGNAL ITEM FURNISH FIBER OPTIC DIGITAL VIDEO RECEIVERS/DATA TRANSMITTERS	7,927.9	M2	GROOVING BRIDGE FLOORS
1	EA	GENERIC SIGNAL ITEM FURNISH FIBER OPTIC DIGITAL VIDEO RECEIVERS/DATA TRANSMITTERS	1,184	M3	CLASS A CONCRETE (BRIDGE)
1	EA	GENERIC SIGNAL ITEM FURNISH FIBER OPTIC DIGITAL VIDEO RECEIVERS/DATA TRANSMITTERS	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION *****
1	EA	GENERIC SIGNAL ITEM FURNISH FIBER OPTIC DIGITAL VIDEO TRANSMITTERS/DATA RECEIVERS			(437+50.704 -L-)
1	EA	GENERIC SIGNAL ITEM RELOCATE CCTV ASSEMBLY	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION *****
		GENERIC SIGNAL ITEM CCTV SYSTEM INTEGRATION			(445+88.000 -L-LT)
393	M	GENERIC SIGNAL ITEM DROP CABLE (24 FIBER)	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION *****
1,889	M	GENERIC SIGNAL ITEM DROP CABLE (6 FIBER)			(445+88.000 -L-RT)
11,119	M	GENERIC SIGNAL ITEM UNDERGROUND MULTIDUCT (31.75MM) (4 CONDUIT)	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION *****
					(465+66.727 -L-)
			130,125	KG	REINFORCING STEEL (BRIDGE)
			19,078	KG	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)
			1,571.52	M	MODIFIED 1829MM PRESTRESSED CONC GIRDERS
			585,300	LS	APPROX ..... KG STRUCTURAL STEEL
			708	M	HP310X79 STEEL PILES
			700	M	HP360X108 STEEL PILES
			875.12	M	CONCRETE BARRIER RAIL
			1,330	M2	100MM SLOPE PROTECTION
			1,930	MTN	PLAIN RIP RAP CLASS II (600MM THICK)
			1,965	M2	FILTER FABRIC FOR DRAINAGE
			Lump Sum	LS	POT BEARINGS
			Lump Sum	LS	ELASTOMERIC BEARINGS
			Lump Sum	LS	EVAZOTE JOINT SEALS
			Lump Sum	LS	EXPANSION JOINT SEALS
			Lump Sum	LS	ELECTRICAL CONDUIT SYSTEM, STA *****
					(445+88 -L-RT)
			38	M	GENERIC STRUCTURE ITEM PILE EXCAVATION IN SOIL
			19	M	GENERIC STRUCTURE ITEM PILE EXCAVATION NOT IN SOIL

**STRUCTURE ITEMS**

\*\*\*\*\* BEGIN SCHEDULE AA \*\*\*\*\*  
 \*\*\*\*\* ( 2 ALTERNATES ) \*\*\*\*\*

\*\*\* OR \*\*\*

\*\*\* END SCHEDULE AA \*\*\*

**FEDERAL AID PROPOSAL, CONTRACTOR LICENSE NOT REQUIRED TO BID****L030722 002****CONTRACT ID : C200691 34365.3.40****DIV OFFICE DURHAM****LENGTH = 5.729 KM****COUNTY : WAKE****GRADING, DRAINAGE, PAVING & STRUCTURES.****DBE GOAL 10.0% COMPLETION DATE : APR 15 2006****I-540 (NORTHERN WAKE EXPRESSWAY) FROM EAST OF US-1 SOUTH OF PERRY CREEK RD TO SOUTH OF BUFFALOE RD.**

ROADWAY ITEMS					
			13.2	M	450MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK
			61.2	M	600MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK
Lump Sum	LS	MOBILIZATION	64.8	M	800MM BIT COAT CS PIPE CULVERTS, TYPE B 2.01MM THICK
Lump Sum	LS	CONSTRUCTION SURVEYING	19.2	M	1000MM BIT COAT CS PIPE CULVERTS, TYPE B 2.77MM THICK
Lump Sum	LS	CLEARING & GRUBBING ... HEC-TARE(S)	9.6	M	1200MM BIT COAT CS PIPE CULVERTS, TYPE B 2.77MM THICK
2	HA	SUPPLEMENTARY CLEARING & GRUBBING	2	EA	***MM BIT COAT CS PIPE ELBOWS, TYPE B ***MM THICK (1000MM, 2.77MM)
4	EA	SEALING ABANDONED WELLS	2	EA	***MM BIT COAT CS PIPE ELBOWS, TYPE B ***MM THICK (300MM, 1.63MM)
1,033,800	M3	UNCLASSIFIED EXCAVATION	4	EA	400MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (12+97.459 YREV)	2	EA	450MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (13+85.173 Y1REV)	1	EA	600MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (396+40 LT LREV)	2	EA	800MM BIT COAT CS PIPE ELBOWS, TYPE B 2.01MM THICK
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (396+40 RT LREV)	99.6	M	PIPE REMOVAL
6,500	M3	UNDERCUT EXCAVATION	Lump Sum	LS	FINE GRADING
17,200	M3	DRAINAGE DITCH EXCAVATION	1,500	MTN	STABILIZER AGGREGATE
620	M	BERM DITCH CONSTRUCTION	37,300	MTN	AGGREGATE BASE COURSE
3,900	M2	REMOVAL OF EXISTING ASPHALT PAVEMENT	6,675	MTN	AGGREGATE FOR CEMENT TREATED BASE COURSE
70	HR	PROOF ROLLING	350	MTN	PORTLAND CEMENT FOR CEMENT TREATED BASE COURSE
2,010	M3	SELECT GRANULAR MATERIAL	75	MTN	INCIDENTAL STONE BASE
2,000	M2	FABRIC FOR SOIL STABILIZATION	37,100	M3	SHOULDER BORROW
2,145	MTN	SELECT MATERIAL, CLASS II	51,100	L	PRIME COAT
1,185	MTN	FOUNDATION CONDITIONING MATERIAL, MINOR STRS	32,160	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0B
76.8	M	300MM RC PIPE CULVERTS, CLASS III	3,530	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0C
1,535.8	M	375MM RC PIPE CULVERTS, CLASS III	10,570	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B
602.8	M	450MM RC PIPE CULVERTS, CLASS III	4,880	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C
991	M	600MM RC PIPE CULVERTS, CLASS III	21,300	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5B
1,204.8	M	750MM RC PIPE CULVERTS, CLASS III	2,600	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5C
778.8	M	900MM RC PIPE CULVERTS, CLASS III	5,765	MTN	ASPHALT CONC SURFACE COURSE, TYPE S12.5C
240	M	1050MM RC PIPE CULVERTS, CLASS III	3,650	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22
205.2	M	1200MM RC PIPE CULVERTS, CLASS III	490	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 70-22
94.8	M	1350MM RC PIPE CULVERTS, CLASS III	50	MTN	ASPHALT PLANT MIX PAVEMENT REPAIR
90	M	****MM RC PIPE CULVERTS, CLASS IV (1050MM)	134,800	M2	***MM PORT CEM CONC PAVEMENT, THROUGH LANES (WITH DOWELS) (300MM)
81.6	M	****MM RC PIPE CULVERTS, CLASS IV (450MM)	8,220	M2	***MM PORT CEM CONC PAVEMENT, RAMPS (WITH DOWELS) (300MM)
111.6	M	****MM RC PIPE CULVERTS, CLASS IV (750MM)	5,000	M2	***MM PORT CEM CONC PAVEMENT, MISCELLANEOUS (WITHOUT DOWELS) (300MM)
10.8	M	***MM CS PIPE CULVERTS, ***** THICK (1000MM, 2.01MM)	Lump Sum	LS	SURFACE TESTING CONCRETE PAVEMENT
28.8	M	***MM CS PIPE CULVERTS, ***** THICK (1200MM, 2.01MM)	69,870	M2	CONCRETE SHOULDERS ADJACENT TO ***MM PAVEMENT (300MM)
8.4	M	450MM CS PIPE CULVERTS, 1.63MM THICK	Lump Sum	LS	FIELD LABORATORY RENTAL, PORT CEM CONC PAVEMENT
16.8	M	800MM CS PIPE CULVERTS, 2.01MM THICK	79	EA	RIGHT OF WAY MARKERS
21.6	M	300MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	2,240	M3	SUBDRAIN EXCAVATION
147.6	M	400MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	1,120	M3	SUBDRAIN FINE AGGREGATE
			2,700	M	150MM PERFORATED SUBDRAIN PIPE

			2	M3	REINFORCED CONCRETE SIGN FOOT- INGS
			2	M3	PLAIN CONCRETE SIGN FOOTINGS
			1,320	KG	SUPPORTS, BREAKAWAY STEEL BEAM
			537	KG	SUPPORTS, SIMPLE STEEL BEAM
			890	M	SUPPORTS, 4.5KG STEEL U-CHANNEL
			8	EA	SUPPORTS, 3KG STEEL U-CHANNEL
			6	EA	SIGN ERECTION, TYPE D
			98	EA	SIGN ERECTION, TYPE E
			14	EA	SIGN ERECTION, TYPE F
			30	EA	SIGN ERECTION, TYPE *** (OVER- HEAD) (A)
			16	EA	SIGN ERECTION, TYPE *** (OVER- HEAD) (B)
			12	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (A)
			38	EA	SIGN ERECTION, MILEMARKERS
			1	EA	SIGN ERECTION, OVERLAY (OVER- HEAD)
			3	EA	SIGN ERECTION, REPOSITION OVERHEAD
			1	EA	DISPOSAL OF SIGN SYSTEM, OVER- HEAD
			3	EA	DISPOSAL OF SIGN SYSTEM, U- CHANNEL
			5	EA	DISPOSAL OF SIGN, A OR B (OVERHEAD)
			Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN BENCH TEST UNIT
			Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN MAIN- TENANCE TRAINING
			Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM DESIGN APPROVAL TESTS
			Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM INTEGRATION
			Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM NTCIP ACCEPTANCE TESTS
			Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FACTORY TESTS
			Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FIELD TESTS
			Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (A)
			Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (C)
			Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (F)
			Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (G)
			Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (H)
			Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (K)
			Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (O)
			Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (P)
			Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE ASSEMBLY (DMS-1)
			Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN ASSEMBLY (DMS-2)
			Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN SYSTEM (DMS-1)
			Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN SYSTEM (DMS-2)
			Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (A)
			Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (B)
			Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (C)
			Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (D)
270	EA	150MM SUBDRAIN PIPE WYES, TEES, & ELBOWS			
18	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET			
36	M	150MM OUTLET PIPE (SUBDRAINS)			
20,500	M	SHOULDER DRAIN			
20,500	M	100MM SHOULDER DRAIN PIPE			
1,300	M	100MM OUTLET PIPE (SHOULDER DRAINS)			
65	EA	CONCRETE PAD FOR SHOULDER DRAIN PIPE OUTLET			
20.2	M3	ENDWALLS			
3.8	M3	REINFORCED ENDWALLS			
0.89	M3	PIPE COLLARS			
122	EA	MASONRY DRAINAGE STRUCTURES			
19.2	M	MASONRY DRAINAGE STRUCTURES			
28	EA	FRAME WITH TWO GRATES, STD 840.***** (840.20)			
86	EA	FRAME WITH TWO GRATES, STD 840.22			
1	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)			
2	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)			
2	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)			
1	EA	FRAME WITH COVER, STD 840.54			
1,235	M	750MM CONCRETE CURB & GUTTER			
2,050	M	SHOULDER BERM GUTTER			
2	EA	MODIFIED CONCRETE FLUME			
315	M2	100MM CONCRETE SIDEWALK			
25	M2	CONCRETE WHEELCHAIR RAMPS			
30	M2	150MM CONCRETE DRIVEWAY			
328	M2	100MM CONCRETE PAVED DITCH			
210	M2	125MM MONOLITHIC CONCRETE IS- LANDS (KEYED IN)			
482	M	PRECAST REINFORCED CONCRETE BARRIER, SINGLE FACED			
11	EA	IMPACT ATTENUATOR UNIT, TYPE 350			
6,311.265	M	STEEL BM GUARDRAIL			
49.53	M	STEEL BM GUARDRAIL, SHOP CURVED			
10	EA	ADDITIONAL GUARDRAIL POSTS			
21	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (B-77)			
4	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (B-83)			
2	EA	GUARDRAIL ANCHOR UNITS, TYPE AT-1			
26	EA	GUARDRAIL ANCHOR UNITS, TYPE CAT-1			
14	EA	GUARDRAIL ANCHOR UNITS, TYPE III			
41	EA	GUARDRAIL ANCHOR UNITS, TYPE 350			
4	EA	GUARDRAIL ANCHOR UNITS, TYPE M-350			
6	EA	GUARDRAIL ANCHOR UNITS, TYPE XI			
6	EA	GUARDRAIL ANCHOR UNITS, TYPE XI (MOD)			
3	EA	GUARDRAIL ANCHOR UNITS, TYPE XIII			
5,300	M	CABLE GUIDERAIL			
28	EA	CABLE GUIDERAIL ANCHOR UNITS			
11,575	M	WOVEN WIRE FENCE, 1200MM FAB- RIC			
2,325	EA	100MM TIMBER FENCE POSTS, 2.30M LONG			
735	EA	125MM TIMBER FENCE POSTS, 2.50M LONG			
300	M	ADDITIONAL BARBED WIRE			
870	MTN	PLAIN RIP RAP, CLASS I			
941	MTN	PLAIN RIP RAP, CLASS B			
6,302.3	M2	FILTER FABRIC FOR DRAINAGE			
4	EA	PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON			

			245	M	GENERIC PAVEMENT MARKING ITEM 300MM POLYUREA PAVEMENT MARK- ING LINES
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (E)	8	EA	GENERIC PAVEMENT MARKING ITEM POLYUREA PAVEMENT MARKING CHARACTER
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (F)	15	EA	GENERIC PAVEMENT MARKING ITEM POLYUREA PAVEMENT MARKING SYMBOLS
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (G)	1,169	EA	PERMANENT RAISED PAVEMENT MARKERS
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (H)	45	EA	FLEXIBLE DELINEATORS (CRYSTAL)
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (I)	32	EA	FLEXIBLE DELINEATORS (YELLOW)
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (J)	25	EA	FLEXIBLE DELINEATORS (CRYSTAL & RED)
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (K)	25	EA	FLEXIBLE DELINEATORS (YELLOW & RED)
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (L)	15	EA	30.5M HIGH MOUNT STANDARD
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (M)	4	EA	36.5M HIGH MOUNT STANDARD
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (N)	1	EA	PORTABLE DRIVE UNIT
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (O)	78	M3	HIGH MOUNT FOUNDATIONS
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (P)	84	EA	HIGH MOUNT LUMINAIRES ***** (1KW, HPS)
			71	EA	LIGHT STANDARD, TYPE MTLT ***** (13.7M, SA 4.6M)
			63	EA	STANDARD FOUNDATIONS ***** (TYPE R1)
49	M2	WORK ZONE SIGNS (STATIONARY)	23	EA	STANDARD FOUNDATIONS ***** (TYPE R2)
68	M2	WORK ZONE SIGNS (PORTABLE)	7	EA	ELECTRIC SERVICE POLES *** ***** (9.1M, CLASS 4)
15	M2	WORK ZONE SIGNS (BARRICADE MOUNTED)	210	M	ELECTRIC SERVICE LATERAL ***** (3 #1/0, USE)
12	EA	FLASHING ARROW PANELS, TYPE C	7	EA	LIGHT CONTROL EQUIPMENT, TYPE RW ***** (240/480 VOLT)
2	EA	CHANGEABLE MESSAGE SIGNS	975	M	ELECTRICAL DUCT, TYPE BD, SIZE **** (TS2)
6	EA	WARNING FLAG SETS	120	M	ELECTRICAL DUCT, TYPE BD, SIZE **** (TS3)
100	EA	DRUMS	360	M	ELECTRICAL DUCT, TYPE JA, SIZE **** (TS2)
50	EA	CONES	305	M	ELECTRICAL DUCT, TYPE JA, SIZE **** (TS3)
48	M	BARRICADES (TYPE III)	115	M	***#8 W/G FEEDER CIRCUIT (2)
640	HR	FLAGGER	175	M	***#6 W/G FEEDER CIRCUIT (2)
26	EA	WARNING LIGHTS (TYPE B)	280	M	***#4 W/G FEEDER CIRCUIT (2)
4	EA	TRUCK MOUNTED IMPACT ATTENUA- TOR (45 MPH)	230	M	***#2 W/G FEEDER CIRCUIT (2)
40	HR	POLICE	4,245	M	***#8 W/G FEEDER CIRCUIT IN SIZE *** CONDUIT (2, TS1.5)
295	EA	TUBULAR MARKERS (FIXED)	2,890	M	***#6 W/G FEEDER CIRCUIT IN SIZE *** CONDUIT (2, TS1.5)
5,761	M	REMOVABLE TAPE PAVEMENT MARK- ING LINES (100MM)	2,255	M	***#4 W/G FEEDER CIRCUIT IN SIZE *** CONDUIT (2, TS1.5)
4,461	M	REMOVABLE TAPE PAVEMENT MARK- ING LINES (150MM)	555	M	***#2 W/G FEEDER CIRCUIT IN SIZE *** CONDUIT (2, TS1.5)
244	M	REMOVABLE TAPE PAVEMENT MARK- ING LINES (200MM)	33	EA	ELECTRICAL JUNCTION BOXES ***** (PC18)
202	M	REMOVABLE TAPE PAVEMENT MARK- ING LINES (300MM)	101	EA	GENERIC LIGHTING ITEM LGT STD LUMINAIRE, TYPE RDW 400W HPS
8	M	REMOVABLE TAPE PAVEMENT MARK- ING LINES (600MM)	15	EA	GENERIC LIGHTING ITEM LGT STD, TYPE MTLT, 13.7M, TA 4.6M
26	EA	REMOVABLE TAPE PAVEMENT MARK- ING SYMBOL	35	MTN	FOUNDATION CONDITIONING MATE- RIAL, UTILITIES CLASS ***** (VI)
23	EA	TEMPORARY RAISED PAVEMENT MARKERS	35	MTN	BEDDING MATERIAL, UTILITIES CLASS ***** (VI)
7,301	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 2.3MM)	10	MTN	PAVEMENT REPAIR FOR UTILITY WORK
6,059	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 3.1MM)			
3,828	M	THERMOPLASTIC PAVEMENT MARKING LINES (150MM, 2.3MM)			
1,050	M	THERMOPLASTIC PAVEMENT MARKING LINES (150MM, 3.1MM)			
451	M	THERMOPLASTIC PAVEMENT MARKING LINES (200MM, 2.3MM)			
1,075	M	THERMOPLASTIC PAVEMENT MARKING LINES (300MM, 2.3MM)			
153	M	THERMOPLASTIC PAVEMENT MARKING LINES (600MM, 3.1MM)			
115	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (2.3MM)			
515	M	COLD APPLIED PLASTIC PAVEMENT MARKING LINES (100MM)			
228	M	COLD APPLIED PLASTIC PAVEMENT MARKING LINES (150MM)			
10	M	COLD APPLIED PLASTIC PAVEMENT MARKING LINES (600MM)			
4,352	M	PAINT PAVEMENT MARKING LINES (100MM)			
150	M	REMOVAL OF PAVEMENT MARKING LINES (100MM)			
4,691	M	GENERIC PAVEMENT MARKING ITEM 150MM POLYUREA PAVEMENT MARK- ING LINES			

238	M	***MM DI WATER PIPE, CLASS ***** WP (400MM, 50, 2.41MPA)	645	M	TRENCHING (UNPAVED)
18	M	150MM DI WATER PIPE, CLASS ***** WP (50, 2.41MPA)	190	M	DIRECTIONAL DRILL POLYETHYLENE CONDUIT, 31.75MM (** CONDUIT) (1)
398	M	300MM DI WATER PIPE, CLASS ***** WP (50, 2.41MPA)	180	M	TRENCH MULTI-DUCT, 31.75MM (** CONDUIT) (1)
10	M	20MM COPPER WATER PIPE, TYPE K	22	EA	JUNCTION BOX (STANDARD SIZE)
1,568	KG	DUCTILE IRON WATER PIPE FIT- TINGS, 1.72MPA MIN WP	5	EA	JUNCTION BOX (OVER-SIZED)
3	EA	150MM GATE VALVE & VALVE BOX, 1.38MPA WP	1	EA	GUY ASSEMBLY
2	EA	*** X ***MM TAPPING SLEEVE, VALVE & VALVE BOX, ****MPA WP (300MM X 300MM)	2	EA	50MM RISER WITH HEAT SHRINK TUBING
1	EA	RELOCATE EXISTING WATER METER	1,260	M	INDUCTIVE LOOP SAWCUT
3	EA	RELOCATE EXISTING FIRE HYDRANT	4,470	M	LEAD-IN CABLE
100	M	***MM DI SEWER PIPE, CLASS *** (200MM, 51)	1,205	M	COMMUNICATIONS CABLE (**FIBER) (12)
372	M	FILL OR REMOVE ABANDONED 300MM PIPE, ***** (DI WATER)	4	EA	INTERCONNECT CENTER
68	M	FILL OR REMOVE ABANDONED 400MM PIPE, ***** (DI WATER)	3	EA	FIBER-OPTIC TRANSCEIVER
97	M	***MM STEEL ENCASEMENT PIPE, ****MM THICK, BY OPEN CUT (600MM, 6.25)	5	EA	DELINEATOR MARKER
1	EA	GENERIC UTILITY ITEM BREAKDOWN & CAP EXISTING MANHOLE	1	EA	FURNISH FIBER-OPTIC TRANSCEIV- ER
5,600	M	TEMPORARY SILT FENCE	13	EA	METAL STRAIN SIGNAL POLE
700	MTN	STONE FOR EROSION CONTROL, CLASS A	13	EA	METAL SIGNAL POLE FOUNDATION
13,000	MTN	STONE FOR EROSION CONTROL, CLASS B	3	EA	SIGNAL PEDESTAL WITH FOUNDA- TION
7,300	MTN	SEDIMENT CONTROL STONE	11	EA	METAL STRAIN POLE DESIGN
50.5	HA	TEMPORARY MULCHING	13	EA	SIGN FOR SIGNALS
2,625	KG	SEED FOR TEMPORARY SEEDING	3	EA	SIGNAL CABINET FOUNDATION
21	MTN	FERTILIZER FOR TEMPORARY SEED- ING	2	EA	CABINET BASE ADAPTER
400	M	TEMPORARY SLOPE DRAINS	2	EA	CONTROLLER WITH CABINET (TYPE 2070L, BASE MOUNTED)
35	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS	28	EA	DETECTOR CHANNEL (TYPE 2070L)
60,000	M3	SILT EXCAVATION	1	EA	CONTROLLER WITH CABINET (NEMA TS-2, TYPE 2 CONTROLLER, TYPE 1 CABINET, BASE MOUNTED)
6,000	M2	SYNTHETIC ROVING	17	EA	DETECTOR CHANNEL (NEMA TS-2)
15,000	M2	MATting FOR EROSION CONTROL	1	EA	CENTRAL COMPUTER
305	M2	PERMANENT SOIL REINFORCEMENT MAT	1	EA	NOTEBOOK COMPUTER
550	M	6.4MM HARDWARE CLOTH	1	EA	PRINTER
1	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (1000MM X 1000MM X 1000MM)	1	EA	GENERIC SIGNAL ITEM FIBER OPTIC SPLICE CABINET (POLE MOUNTED)
2	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (1200MM X 1200MM X 1200MM)	2	EA	GENERIC SIGNAL ITEM MAST ARM FOR VIDEO SYSTEM
180	M3	STILLING BASINS	1	EA	GENERIC SIGNAL ITEM SITE SURVEY
36	EA	SPECIAL STILLING BASINS	***** BEGIN SCHEDULE AA ***** ***** ( 2 ALTERNATES ) *****		
62.5	HA	SEEDING & MULCHING	66,475	M2	LIME TREATED SOIL (SLURRY METHOD)
27.5	HA	MOWING	735	MTN	LIME FOR LIME TREATED SOIL
600	KG	SEED FOR REPAIR SEEDING	199,435	M2	***MM SOIL CEMENT BASE (180MM)
2	MTN	FERTILIZER FOR REPAIR SEEDING	6,000	MTN	PORTLAND CEMENT FOR SOIL CE- MENT BASE
1,750	KG	SEED FOR SUPPLEMENTAL SEEDING	2,700	MTN	AGGREGATE FOR SOIL CEMENT BASE
104.5	MTN	FERTILIZER TOPDRESSING	180,850	L	ASPHALT CURING SEAL
1.5	HA	SPECIALIZED SEEDING UNDER GUIDERAIL & GUARDRAIL (CENTI- PEDE)	10	MTN	BLOTTING SAND
105	M	IMPERVIOUS DIKE	*** OR ***		
80	HR	SPECIALIZED HAND MOWING	130,000	MTN	GENERIC PAVING ITEM AGGREGATE BASE COURSE FOR STABILIZATION
24	EA	RESPONSE FOR EROSION CONTROL	*** END SCHEDULE AA *** ***** BEGIN SCHEDULE HA ***** ***** ( 2 ALTERNATES ) *****		
420	M3	CULVERT DIVERSION CHANNEL	4	EA	GENERIC SIGNAL ITEM CAMERA WITH INTERNAL LOOP EMULATOR PROCESSING UNIT
5.75	HA	REFORESTATION	*** OR ***		
8	EA	GENERIC EROSION CONTROL ITEM DRY DETENTION BASIN	4	EA	GENERIC SIGNAL ITEM CAMERA WITHOUT INTERNAL LOOP EMULATOR PROCESSING UNIT
60	MTN	GENERIC EROSION CONTROL ITEM BOULDERS	1	EA	GENERIC SIGNAL ITEM EXTERNAL LOOP EMULATOR PROCESSING UNIT
1,135	M	SIGNAL CABLE	*** END SCHEDULE HA ***		
34	EA	VEHICLE SIGNAL HEAD (300MM, 3 SECTION)	<b>CULVERT ITEMS</b>		
30	M	MESSANGER CABLE (6.35MM)	Lump Sum	LS	CULVERT EXCAVATION, STA ***** (369+15.500 -LREV-)
750	M	MESSANGER CABLE (9.52MM)			
345	M	TRACER WIRE			

Lump Sum	LS	CULVERT EXCAVATION, STA ***** (389+42.200 -LREV-)
544.5	MTN	FOUNDATION CONDITIONING MATERIAL, BOX CULVERT
1,001.5	M3	CLASS A CONCRETE (CULVERT)
70,140	KG	REINFORCING STEEL (CULVERT)

Lump Sum	LS	ELECTRICAL CONDUIT SYSTEM, STA ***** (396+37.050 -LREV-RT)
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## STRUCTURE ITEMS

Lump Sum	LS	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS AT STA ***** (396+37.050 -LREV-RT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,363+53.676 -LREV-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,408+42.504 -LREV-)
223.6	M	*****MM DIA DRILLED PIERS IN SOIL (1220MM)
144	M	*****MM DIA DRILLED PIERS NOT IN SOIL (1220MM)
78.6	M	PERMANENT STEEL CASING FOR *****MM DRILLED PIER (1220MM)
8	EA	SID INSPECTION
8	EA	SPT TESTING
8	EA	CROSSHOLE SONIC LOGGING
1,579.2	M	CSL TUBES
11,801.9	M2	REINFORCED CONCRETE DECK SLAB
10,357.3	M2	GROOVING BRIDGE FLOORS
822.8	M3	CLASS A CONCRETE (BRIDGE)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (353+71.453 -L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (353+72.854 -L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (363+53.676 -LREV-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (396+37.050 -LREV-LT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (396+37.050 -LREV-RT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (408+42.504 -LREV-)
102,538	KG	REINFORCING STEEL (BRIDGE)
18,115	KG	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)
2,296	M	MODIFIED 1600MM PRESTRESSED CONC GIRDERS
1,884,600	LS	APPROX ..... KG STRUCTURAL STEEL
1,226	M	HP310X79 STEEL PILES
36	EA	STEEL PILE POINTS
143.282	M	THREE BAR METAL RAIL
1,171.013	M	CONCRETE BARRIER RAIL
737	M2	100MM SLOPE PROTECTION
2,292	MTN	PLAIN RIP RAP CLASS II (600MM THICK)
2,338	M2	FILTER FABRIC FOR DRAINAGE
Lump Sum	LS	POT BEARINGS
Lump Sum	LS	ELASTOMERIC BEARINGS
Lump Sum	LS	EVAZOTE JOINT SEALS
Lump Sum	LS	MODULAR EXPANSION JOINT SEALS
Lump Sum	LS	ELECTRICAL CONDUIT SYSTEM, STA ***** (353+71.453 -L-)
Lump Sum	LS	ELECTRICAL CONDUIT SYSTEM, STA ***** (353+72.854 -L-)



**I-540 (NORTHERN WAKE EXPRESSWAY) FROM EAST OF US-1 SOUTH OF PERRY CREEK RD TO US-64 EAST OF KNIGHTDALE.**

ROADWAY ITEMS			90	M	****MM RC PIPE CULVERTS, CLASS IV (1050MM)
Lump Sum	LS	MOBILIZATION	81.6	M	****MM RC PIPE CULVERTS, CLASS IV (450MM)
Lump Sum	LS	CONSTRUCTION SURVEYING			
Lump Sum	LS	CLEARING & GRUBBING ... HEC-TARE(S)	111.6	M	****MM RC PIPE CULVERTS, CLASS IV (750MM)
4	HA	SUPPLEMENTARY CLEARING & GRUB-BING	122.4	M	****MM RC PIPE CULVERTS, CLASS IV (900MM)
11	EA	SEALING ABANDONED WELLS			
2,289,800	M3	UNCLASSIFIED EXCAVATION			
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (12+97.459 YREV)	216	M	150MM CS PIPE CULVERTS, 1.63MM THICK (SPRING BOX)
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (12+99.50)	10.8	M	****MM CS PIPE CULVERTS, ****MM THICK (1000MM, 2.01MM)
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (13+85.173 Y1REV)	28.8	M	****MM CS PIPE CULVERTS, ****MM THICK (1200MM, 2.01MM)
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (16+53.916)	30	M	400MM CS PIPE CULVERTS, 1.63MM THICK
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (396+40 LT LREV)	8.4	M	450MM CS PIPE CULVERTS, 1.63MM THICK
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (396+40 RT LREV)	39.6	M	600MM CS PIPE CULVERTS, 1.63MM THICK
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (445+88.00-LT)	37.2	M	800MM CS PIPE CULVERTS, 2.01MM THICK
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (445+88.00-RT)	21.6	M	300MM BIT COAT CS PIPE CUL-VERTS, TYPE B 1.63MM THICK
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (445+88.00-LT)	396	M	400MM BIT COAT CS PIPE CUL-VERTS, TYPE B 1.63MM THICK
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (445+88.00-RT)	96	M	450MM BIT COAT CS PIPE CUL-VERTS, TYPE B 1.63MM THICK
14,500	M3	UNDERCUT EXCAVATION	72	M	600MM BIT COAT CS PIPE CUL-VERTS, TYPE B 1.63MM THICK
2,400	MTN	CLASS IV SUBGRADE STABILIZA-TION	98.4	M	800MM BIT COAT CS PIPE CUL-VERTS, TYPE B 2.01MM THICK
25,490	M3	DRAINAGE DITCH EXCAVATION	20.4	M	900MM BIT COAT CS PIPE CUL-VERTS, TYPE B 2.01MM THICK
620	M	BERM DITCH CONSTRUCTION	19.2	M	1000MM BIT COAT CS PIPE CUL-VERTS, TYPE B 2.77MM THICK
12,900	M2	REMOVAL OF EXISTING ASPHALT PAVEMENT	9.6	M	1200MM BIT COAT CS PIPE CUL-VERTS, TYPE B 2.77MM THICK
1,150	M2	BREAKING OF EXISTING ASPHALT PAVEMENT	2	EA	****MM BIT COAT CS PIPE ELBOWS, TYPE B ****MM THICK (1000MM, 2.77MM)
142	HR	PROOF ROLLING			
6,035	M3	SELECT GRANULAR MATERIAL			
6,000	M2	FABRIC FOR SOIL STABILIZATION	2	EA	****MM BIT COAT CS PIPE ELBOWS, TYPE B ****MM THICK (300MM, 1.63MM)
500	M2	TEMPORARY SHORING			
285	M2	GENERIC GRADING ITEM	26	EA	400MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK
		ROCK PLATING			
2,680	MTN	SELECT MATERIAL, CLASS II			
3,435	MTN	FOUNDATION CONDITIONING MATE-RIAL, MINOR STRS	10	EA	450MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK
93.6	M	375MM SIDE DRAIN PIPE	3	EA	600MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK
76.8	M	300MM RC PIPE CULVERTS, CLASS III	2	EA	800MM BIT COAT CS PIPE ELBOWS, TYPE B 2.01MM THICK
4,061.8	M	375MM RC PIPE CULVERTS, CLASS III	424.4	M	PIPE REMOVAL
1,454	M	450MM RC PIPE CULVERTS, CLASS III	5	EA	PIPE CLEAN-OUT
2,386.6	M	600MM RC PIPE CULVERTS, CLASS III	350	M2	150MM SLOPE PROTECTION
			Lump Sum	LS	FINE GRADING
			2,500	MTN	STABILIZER AGGREGATE
2,377.2	M	750MM RC PIPE CULVERTS, CLASS III	75,400	MTN	AGGREGATE BASE COURSE
1,063.2	M	900MM RC PIPE CULVERTS, CLASS III	6,675	MTN	AGGREGATE FOR CEMENT TREATED BASE COURSE
349.2	M	1050MM RC PIPE CULVERTS, CLASS III	350	MTN	PORTLAND CEMENT FOR CEMENT TREATED BASE COURSE
253.2	M	1200MM RC PIPE CULVERTS, CLASS III	155	MTN	INCIDENTAL STONE BASE
159.6	M	1350MM RC PIPE CULVERTS, CLASS III	57,685	M3	SHOULDER BORROW
			62,800	L	PRIME COAT
			4,130	M2	INCIDENTAL MILLING
15.6	M	1650MM RC PIPE CULVERTS, CLASS III	59,060	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0B

			2	EA	MODIFIED CONCRETE FLUME
			490	M	CONCRETE EXPRESSWAY GUTTER
			315	M2	100MM CONCRETE SIDEWALK
26,130	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0C	25	M2	CONCRETE WHEELCHAIR RAMPS
11,240	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	48.4	M2	150MM CONCRETE DRIVEWAY
24,980	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	455	M2	100MM CONCRETE PAVED DITCH
33,075	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	1,310	M2	125MM MONOLITHIC CONCRETE ISLANDS (SURFACE MOUNTED)
2,600	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	210	M2	125MM MONOLITHIC CONCRETE ISLANDS (KEYED IN)
18,515	MTN	ASPHALT CONC SURFACE COURSE, TYPE S12.5C	597	M	PRECAST REINFORCED CONCRETE BARRIER, SINGLE FACED
7,410	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22	25	EA	IMPACT ATTENUATOR UNIT, TYPE 350
1,195	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 70-22	11,584.305	M	STEEL BM GUARDRAIL
100	MTN	ASPHALT PLANT MIX PAVEMENT REPAIR	83.82	M	STEEL BM GUARDRAIL, SHOP CURVED
265,890	M2	***MM PORT CEM CONC PAVEMENT, THROUGH LANES (WITH DOWELS) (300MM)	8	EA	STEEL BM GUARDRAIL TERMINAL SECTIONS
8,220	M2	***MM PORT CEM CONC PAVEMENT, RAMPS (WITH DOWELS) (300MM)	20	EA	ADDITIONAL GUARDRAIL POSTS
11,810	M2	***MM PORT CEM CONC PAVEMENT, MISCELLANEOUS (WITHOUT DOWELS) (300MM)	29	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (B-77)
Lump Sum	LS	SURFACE TESTING CONCRETE PAVEMENT	4	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (B-83)
140,300	M2	CONCRETE SHOULDERS ADJACENT TO ***MM PAVEMENT (300MM)	2	EA	GUARDRAIL ANCHOR UNITS, TYPE AT-1
Lump Sum	LS	FIELD LABORATORY RENTAL, PORT CEM CONC PAVEMENT	42	EA	GUARDRAIL ANCHOR UNITS, TYPE CAT-1
242	EA	RIGHT OF WAY MARKERS	26	EA	GUARDRAIL ANCHOR UNITS, TYPE III
5,966	M3	SUBDRAIN EXCAVATION	65	EA	GUARDRAIL ANCHOR UNITS, TYPE 350
2,983	M3	SUBDRAIN FINE AGGREGATE	6	EA	GUARDRAIL ANCHOR UNITS, TYPE M-350
4,500	M	100MM PERFORATED SUBDRAIN PIPE	6	EA	GUARDRAIL ANCHOR UNITS, TYPE XI
2,700	M	150MM PERFORATED SUBDRAIN PIPE	6	EA	GUARDRAIL ANCHOR UNITS, TYPE XI (MOD)
450	EA	100MM SUBDRAIN PIPE WYES, TEES, & ELBOWS	3	EA	GUARDRAIL ANCHOR UNITS, TYPE XIII
270	EA	150MM SUBDRAIN PIPE WYES, TEES, & ELBOWS	130	M	REMOVE EXISTING GUARDRAIL
48	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET	53.34	M	TEMPORARY STEEL BM GUARDRAIL
60	M	100MM OUTLET PIPE (SUBDRAINS)	1	EA	GUARDRAIL ANCHOR UNITS, TYPE 350 TEMPORARY
36	M	150MM OUTLET PIPE (SUBDRAINS)	10,586.06	M	CABLE GUIDERAIL
41,100	M	SHOULDER DRAIN	52	EA	CABLE GUIDERAIL ANCHOR UNITS
41,100	M	100MM SHOULDER DRAIN PIPE	24,100	M	WOVEN WIRE FENCE, 1200MM FABRIC
3,450	M	100MM OUTLET PIPE (SHOULDER DRAINS)	4,747	EA	100MM TIMBER FENCE POSTS, 2.30M LONG
165	EA	CONCRETE PAD FOR SHOULDER DRAIN PIPE OUTLET	1,685	EA	125MM TIMBER FENCE POSTS, 2.50M LONG
38.6	M3	ENDWALLS	900	M	ADDITIONAL BARBED WIRE
7.6	M3	REINFORCED ENDWALLS	1,320	MTN	PLAIN RIP RAP, CLASS I
1.18	M3	PIPE COLLARS	1,265	MTN	PLAIN RIP RAP, CLASS II
0.36	M3	PIPE PLUGS	2,295	MTN	PLAIN RIP RAP, CLASS B
262	EA	MASONRY DRAINAGE STRUCTURES	16,052.3	M2	FILTER FABRIC FOR DRAINAGE
7.37	M3	MASONRY DRAINAGE STRUCTURES	6	EA	PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON
52.371	M	MASONRY DRAINAGE STRUCTURES	4	M3	REINFORCED CONCRETE SIGN FOOTINGS
6	EA	FRAME WITH GRATE, STD 840.22	3	M3	PLAIN CONCRETE SIGN FOOTINGS
44	EA	FRAME WITH TWO GRATES, STD 840.***** (840.20)	2,321	KG	SUPPORTS, BREAKAWAY STEEL BEAM
1	EA	FRAME WITH TWO GRATES, STD 840.16	826	KG	SUPPORTS, SIMPLE STEEL BEAM
180	EA	FRAME WITH TWO GRATES, STD 840.22	1,431	M	SUPPORTS, 4.5KG STEEL U-CHANNEL
2	EA	FRAME WITH TWO GRATES, STD 840.24	14	EA	SUPPORTS, 3KG STEEL U-CHANNEL
4	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	14	EA	SIGN ERECTION, TYPE D
5	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	157	EA	SIGN ERECTION, TYPE E
9	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	17	EA	SIGN ERECTION, TYPE F
1	EA	FRAME WITH COVER, STD 840.54	47	EA	SIGN ERECTION, TYPE *** (OVER-HEAD) (A)
3	EA	STEEL FRAME WITH TWO GRATES, STD 840.37	23	EA	SIGN ERECTION, TYPE *** (OVER-HEAD) (B)
1,619	M	750MM CONCRETE CURB & GUTTER	15	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (A)
2,990	M	SHOULDER BERM GUTTER	4	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (B)
			68	EA	SIGN ERECTION, MILEMARKERS
			1	EA	SIGN ERECTION, OVERLAY (OVER-HEAD)

				Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (J) FOR R-2000G
				Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (K) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (O) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (P) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE ASSEMBLY (DMS-1)
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN ASSEMBLY (DMS-2)
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN ASSEMBLY (DMS-4)
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN SYSTEM (DMS-1)
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN SYSTEM (DMS-2)
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN SYSTEM (DMS-3)
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN SYSTEM (DMS-4)
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD DYNAMIC MESSAGE SIGN ASSEMBLY (DMS-3)
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (A) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (A) FOR R-2000G
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (B) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (B) FOR R-2000G
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (C) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (C) FOR R-2000G
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (D) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (D) FOR R-2000G
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (E) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (F) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (F) FOR R-2000G
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (G) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (G) FOR R-2000G
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (H) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (H) FOR R-2000G
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (I) FOR R-2000F
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (I) FOR R-2000G
				Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (J) FOR R-2000F
3	EA	SIGN ERECTION, REPOSITION OVERHEAD				
1	EA	RELOCATE SIGN, TYPE ***** (D)				
3	EA	RELOCATE SIGN, TYPE ***** (E)				
1	EA	DISPOSAL OF SIGN SYSTEM, OVER- HEAD				
3	EA	DISPOSAL OF SIGN SYSTEM, STEEL BEAM				
42	EA	DISPOSAL OF SIGN SYSTEM, U- CHANNEL				
3	EA	DISPOSAL OF SUPPORT, U-CHANNEL				
5	EA	DISPOSAL OF SIGN, A OR B (OVERHEAD)				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN BENCH TEST UNIT FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN BENCH TEST UNIT FOR R-2000G				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN MAIN- TENANCE TRAINING FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN MAIN- TENANCE TRAINING FOR R-2000G				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM DESIGN APPROVAL TESTS FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM DESIGN APPROVAL TESTS FOR R-2000G				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM INTEGRATION FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM INTEGRATION FOR R-2000G				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM NTCIP ACCEPTANCE TESTS FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM NTCIP ACCEPTANCE TESTS FOR R-2000G				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FACTORY TESTS FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FACTORY TESTS FOR R-2000G				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FIELD TESTS FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FIELD TESTS FOR R-2000G				
Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (A) FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (C) FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (F) FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (F) FOR R-2000G				
Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (G) FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (H) FOR R-2000F				
Lump Sum	LS	GENERIC SIGNING ITEM LRS LIGHTING SYSTEM (I) FOR R-2000G				

			26,364	M	PAINT PAVEMENT MARKING LINES (100MM)
			9,386	M	PAINT PAVEMENT MARKING LINES (150MM)
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (J) FOR R-2000G	1,092	M	PAINT PAVEMENT MARKING LINES (200MM)
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (K) FOR R-2000F	308	M	PAINT PAVEMENT MARKING LINES (600MM)
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (L) FOR R-2000F	84	EA	PAINT PAVEMENT MARKING SYMBOL
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (M) FOR R-2000F	983	M	REMOVAL OF PAVEMENT MARKING LINES (100MM)
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (N) FOR R-2000F	48,598	M	GENERIC PAVEMENT MARKING ITEM 150MM POLYUREA PAVEMENT MARKING LINES
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (O) FOR R-2000F	1,945	M	GENERIC PAVEMENT MARKING ITEM 300MM POLYUREA PAVEMENT MARKING LINES
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (P) FOR R-2000F	8	EA	GENERIC PAVEMENT MARKING ITEM POLYUREA PAVEMENT MARKING CHARACTER
Lump Sum	LS	GENERIC SIGNING ITEM OVERHEAD SIGN ASSEMBLY (P) FOR R-2000F	35	EA	GENERIC PAVEMENT MARKING ITEM POLYUREA PAVEMENT MARKING SYMBOLS
123	M2	WORK ZONE SIGNS (STATIONARY)	2,183	EA	PERMANENT RAISED PAVEMENT MARKERS
134	M2	WORK ZONE SIGNS (PORTABLE)	140	EA	FLEXIBLE DELINEATORS (CRYSTAL)
43	M2	WORK ZONE SIGNS (BARRICADE MOUNTED)	80	EA	FLEXIBLE DELINEATORS (YELLOW)
14	EA	FLASHING ARROW PANELS, TYPE C	45	EA	FLEXIBLE DELINEATORS (CRYSTAL & RED)
4	EA	CHANGEABLE MESSAGE SIGNS	45	EA	FLEXIBLE DELINEATORS (YELLOW & RED)
10	EA	WARNING FLAG SETS	9	EA	OBJECT MARKERS (END OF ROAD)
260	EA	DRUMS	15	EA	30.5M HIGH MOUNT STANDARD
100	EA	CONES	4	EA	36.5M HIGH MOUNT STANDARD
126	M	BARRICADES (TYPE III)	1	EA	PORTABLE DRIVE UNIT
1,360	HR	FLAGGER	78	M3	HIGH MOUNT FOUNDATIONS
36	EA	WARNING LIGHTS (TYPE B)	84	EA	HIGH MOUNT LUMINAIRES ***** (1KW, HPS)
4	EA	TEMPORARY CRASH CUSHIONS	71	EA	LIGHT STANDARD, TYPE MTLT ***** (13.7M, SA 4.6M)
3	EA	RESET TEMPORARY CRASH CUSHIONS	63	EA	STANDARD FOUNDATIONS ***** (TYPE R1)
6	EA	TRUCK MOUNTED IMPACT ATTENUATOR (45 MPH)	23	EA	STANDARD FOUNDATIONS ***** (TYPE R2)
352	M	PORTABLE CONCRETE BARRIER	7	EA	ELECTRIC SERVICE POLES *** ***** (9.1M, CLASS 4)
391	M	PORTABLE CONCRETE BARRIER (ANCHORED)	210	M	ELECTRIC SERVICE LATERAL ***** (3 #1/0, USE)
352	M	PORTABLE CONCRETE BARRIER (DRAINAGE)	7	EA	LIGHT CONTROL EQUIPMENT, TYPE RW ***** (240/480 VOLT)
375	M	RESET PORTABLE CONCRETE BARRIER	975	M	ELECTRICAL DUCT, TYPE BD, SIZE ***** (TS2)
88	HR	POLICE	120	M	ELECTRICAL DUCT, TYPE BD, SIZE ***** (TS3)
408	EA	TUBULAR MARKERS (FIXED)	360	M	ELECTRICAL DUCT, TYPE JA, SIZE ***** (TS2)
6,160	M	REMOVABLE TAPE PAVEMENT MARKING LINES (100MM)	305	M	ELECTRICAL DUCT, TYPE JA, SIZE ***** (TS3)
4,461	M	REMOVABLE TAPE PAVEMENT MARKING LINES (150MM)	115	M	**#8 W/G FEEDER CIRCUIT (2)
244	M	REMOVABLE TAPE PAVEMENT MARKING LINES (200MM)	175	M	**#6 W/G FEEDER CIRCUIT (2)
202	M	REMOVABLE TAPE PAVEMENT MARKING LINES (300MM)	280	M	**#4 W/G FEEDER CIRCUIT (2)
8	M	REMOVABLE TAPE PAVEMENT MARKING LINES (600MM)	230	M	**#2 W/G FEEDER CIRCUIT (2)
26	EA	REMOVABLE TAPE PAVEMENT MARKING SYMBOL	4,245	M	**#8 W/G FEEDER CIRCUIT IN SIZE *** CONDUIT (2, TS1.5)
337	EA	TEMPORARY RAISED PAVEMENT MARKERS	2,890	M	**#6 W/G FEEDER CIRCUIT IN SIZE *** CONDUIT (2, TS1.5)
21,179	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 2.3MM)	2,255	M	**#4 W/G FEEDER CIRCUIT IN SIZE *** CONDUIT (2, TS1.5)
11,838	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 3.1MM)	555	M	**#2 W/G FEEDER CIRCUIT IN SIZE *** CONDUIT (2, TS1.5)
3,828	M	THERMOPLASTIC PAVEMENT MARKING LINES (150MM, 2.3MM)	33	EA	ELECTRICAL JUNCTION BOXES ***** (PC18)
1,050	M	THERMOPLASTIC PAVEMENT MARKING LINES (150MM, 3.1MM)			
1,650	M	THERMOPLASTIC PAVEMENT MARKING LINES (200MM, 2.3MM)			
1,075	M	THERMOPLASTIC PAVEMENT MARKING LINES (300MM, 2.3MM)			
369	M	THERMOPLASTIC PAVEMENT MARKING LINES (600MM, 3.1MM)			
211	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (2.3MM)			
1,831	M	COLD APPLIED PLASTIC PAVEMENT MARKING LINES (100MM)			
228	M	COLD APPLIED PLASTIC PAVEMENT MARKING LINES (150MM)			
20	M	COLD APPLIED PLASTIC PAVEMENT MARKING LINES (600MM)			
4	EA	COLD APPLIED PLASTIC PAVEMENT MARKING SYMBOL			

			1	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (1000MM X 1000MM X 1000MM)
101	EA	GENERIC LIGHTING ITEM LGT STD LUMINAIRE, TYPE RDW 400W HPS	2	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (1200MM X 1200MM X 1200MM)
15	EA	GENERIC LIGHTING ITEM LGT STD, TYPE MTLT, 13.7M, TA 4.6M	890	M3	STILLING BASINS
182	MTN	FOUNDATION CONDITIONING MATE- RIAL,, UTILITIES CLASS ***** (VI)	84	EA	SPECIAL STILLING BASINS
182	MTN	BEDDING MATERIAL, UTILITIES CLASS ***** (VI)	154.5	HA	SEEDING & MULCHING
15	MTN	PAVEMENT REPAIR FOR UTILITY WORK	65	HA	MOWING
508	M	***MM DI WATER PIPE, CLASS ***** WP (400MM, 50, 2.41MPA)	1,425	KG	SEED FOR REPAIR SEEDING
18	M	150MM DI WATER PIPE, CLASS ***** WP (50, 2.41MPA)	4.75	MTN	FERTILIZER FOR REPAIR SEEDING
529	M	300MM DI WATER PIPE, CLASS ***** WP (50, 2.41MPA)	4,350	KG	SEED FOR SUPPLEMENTAL SEEDING
14	M	150MM DI WATER PIPE, PC 2.41MPA	259.5	MTN	FERTILIZER TOPDRESSING
241	M	400MM DI WATER PIPE, PC ***MPA (2.41MPA)	2.6	HA	SPECIALIZED SEEDING UNDER GUIDERAIL & GUARDRAIL (CENTI- PEDE)
10	M	20MM COPPER WATER PIPE, TYPE K	225	M	IMPERVIOUS DIKE
4,078	KG	DUCTILE IRON WATER PIPE FIT- TINGS, 1.72MPA MIN WP	140	HR	SPECIALIZED HAND MOWING
3	EA	150MM GATE VALVE & VALVE BOX, 1.38MPA WP	56	EA	RESPONSE FOR EROSION CONTROL
2	EA	*** X ***MM TAPPING SLEEVE, VALVE & VALVE BOX, ****MPA WP (300MM X 300MM)	870	M3	CULVERT DIVERSION CHANNEL
1	EA	RELOCATE EXISTING WATER METER	11.75	HA	REFORESTATION
4	EA	RELOCATE EXISTING FIRE HYDRANT	8	EA	GENERIC EROSION CONTROL ITEM DRY DETENTION BASIN
100	M	***MM DI SEWER PIPE, CLASS *** (200MM, 51)	164	MTN	GENERIC EROSION CONTROL ITEM BOULDERS
372	M	FILL OR REMOVE ABANDONED 300MM PIPE, ***** (DI WATER)	3,330	M	SIGNAL CABLE
137	M	FILL OR REMOVE ABANDONED 400MM PIPE, ***** (DI WATER)	89	EA	VEHICLE SIGNAL HEAD (300MM, 3 SECTION)
209	M	***MM STEEL ENCASMENT PIPE, ****MM THICK, BY OPEN CUT (500MM, 6.25MM)	10	EA	VEHICLE SIGNAL HEAD (300MM, 5 SECTION)
97	M	***MM STEEL ENCASMENT PIPE, ****MM THICK, BY OPEN CUT (600MM, 6.25)	34	EA	BACKPLATE
58	M	***MM STEEL ENCASMENT PIPE, ****MM THICK, BY OPEN CUT (750MM, 9.525MM)	1,466	M	MESSENGER CABLE (6.35MM)
1	EA	GENERIC UTILITY ITEM BREAKDOWN & CAP EXISTING MANHOLE	2,060	M	MESSENGER CABLE (9.52MM)
1	EA	GENERIC UTILITY ITEM REMOVE AND STOCKPILE EXISTING FIRE HYDRANT	14,265	M	TRACER WIRE
4	EA	GENERIC UTILITY ITEM REMOVE EXISTING BLOWOFF	1,887	M	TRENCHING (UNPAVED)
13,100	M	TEMPORARY SILT FENCE	190	M	DIRECTIONAL DRILL POLYETHYLENE CONDUIT, 31.75MM (** CONDUIT) (1)
1,325	MTN	STONE FOR EROSION CONTROL, CLASS A	25	M	DIRECTIONAL DRILL POLYETHYLENE CONDUIT, 31.75MM (** CONDUIT) (2)
35,500	MTN	STONE FOR EROSION CONTROL, CLASS B	1,551	M	DIRECTIONAL DRILL OUTER-DUCT CONDUIT, 125MM
18,800	MTN	SEDIMENT CONTROL STONE	180	M	TRENCH MULTI-DUCT, 31.75MM (** CONDUIT) (1)
120	HA	TEMPORARY MULCHING	892	M	TRENCH MULTI-DUCT, 31.75MM (** CONDUIT) (4)
6,500	KG	SEED FOR TEMPORARY SEEDING	1,618	M	MULTI-DUCT, 31.75MM IN OUTER- DUCT (** CONDUIT) (4)
52.25	MTN	FERTILIZER FOR TEMPORARY SEED- ING	47	EA	JUNCTION BOX (STANDARD SIZE)
1,100	M	TEMPORARY SLOPE DRAINS	105	EA	JUNCTION BOX (OVER-SIZED)
85	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS	11	EA	JUNCTION BOX (OVER-SIZED, HEA- VY DUTY)
155,500	M3	SILT EXCAVATION	10	EA	WOOD POLE
12,000	M2	SYNTHETIC ROVING	18	EA	GUY ASSEMBLY
30,000	M2	MATting FOR EROSION CONTROL	5	EA	50MM RISER WITH WEATHERHEAD
555	M2	PERMANENT SOIL REINFORCEMENT MAT	12	EA	50MM RISER WITH HEAT SHRINK TUBING
1,150	M	6.4MM HARDWARE CLOTH	2,700	M	INDUCTIVE LOOP SAWCUT
100	M	***MM TEMPORARY PIPE (450MM)	8,910	M	LEAD-IN CABLE
3	EA	***X***X***MM PERFORATED CS PIPE TEE RISER, 1.63MM THICK (800MM X 800MM X 800MM)	3	EA	MICROWAVE VEHICLE DETECTOR
			2,972	M	COMMUNICATIONS CABLE (**FIBER) (12)
			12,614	M	COMMUNICATIONS CABLE (**FIBER) (72)
			12	EA	AERIAL SPLICE ENCLOSURE
			22	EA	INTERCONNECT CENTER
			10	EA	FIBER-OPTIC TRANSCEIVER
			73	EA	DELINEATOR MARKER
			3	EA	FURNISH FIBER-OPTIC TRANSCEIV- ER
			37	EA	METAL STRAIN SIGNAL POLE
			37	EA	METAL SIGNAL POLE FOUNDATION
			3	EA	SIGNAL PEDESTAL WITH FOUNDA- TION
			13	EA	METAL STRAIN POLE DESIGN
			48	EA	SIGN FOR SIGNALS
			8	EA	SIGNAL CABINET FOUNDATION
			4	EA	CABINET BASE ADAPTER
			3	EA	CONTROLLER WITH CABINET (TYPE 170E, BASE MOUNTED)
			49	EA	DETECTOR CHANNEL (TYPE 170)

4	EA	CONTROLLER WITH CABINET (TYPE 2070L, BASE MOUNTED)
40	EA	DETECTOR CHANNEL (TYPE 2070L)
1	EA	CONTROLLER WITH CABINET (NEMA TS-2, TYPE 2 CONTROLLER, TYPE 1 CABINET, BASE MOUNTED)
22	EA	DETECTOR CHANNEL (NEMA TS-2)
1	EA	CENTRAL COMPUTER
2	EA	NOTEBOOK COMPUTER
1	EA	PRINTER
6	EA	GENERIC SIGNAL ITEM CCTV ASSEMBLY
6	EA	GENERIC SIGNAL ITEM CCTV CAMERA WOOD POLE (15.2M)
5	EA	GENERIC SIGNAL ITEM FIBER OPTIC DATA TRANCEIVER (SINGLE FIBER)
7	EA	GENERIC SIGNAL ITEM FIBER OPTIC DIGITAL VIDEO RECEIVERS/DATA TRANSMITTERS
7	EA	GENERIC SIGNAL ITEM FIBER OPTIC DIGITAL VIDEO TRANSMITTERS/DATA RECEIVERS
1	EA	GENERIC SIGNAL ITEM FIBER OPTIC SPLICE CABINET (POLE MOUNTED)
1	EA	GENERIC SIGNAL ITEM FURNISH FIBER OPTIC DATA TRANSCEIVER (SINGLE FIBER)
1	EA	GENERIC SIGNAL ITEM FURNISH FIBER OPTIC DIGITAL VIDEO RECEIVERS/DATA TRANSMITTERS
1	EA	GENERIC SIGNAL ITEM FURNISH FIBER OPTIC DIGITAL VIDEO TRANSMITTERS/DATA RECEIVERS
2	EA	GENERIC SIGNAL ITEM MAST ARM FOR VIDEO SYSTEM
1	EA	GENERIC SIGNAL ITEM RELOCATE CCTV ASSEMBLY
1	EA	GENERIC SIGNAL ITEM SITE SURVEY
Lump Sum	LS	GENERIC SIGNAL ITEM CCTV SYSTEM INTEGRATION
393	M	GENERIC SIGNAL ITEM DROP CABLE (24 FIBER)
1,889	M	GENERIC SIGNAL ITEM DROP CABLE (6 FIBER)
11,119	M	GENERIC SIGNAL ITEM UNDERGROUND MULTIDUCT (31.75MM) (4 CONDUIT)
***** BEGIN SCHEDULE AA *****		
***** ( 2 ALTERNATES ) *****		
124,489	M2	LIME TREATED SOIL (SLURRY METHOD)
1,375	MTN	LIME FOR LIME TREATED SOIL
373,485	M2	***MM SOIL CEMENT BASE (180MM)
11,225	MTN	PORTLAND CEMENT FOR SOIL CEMENT BASE
5,050	MTN	AGGREGATE FOR SOIL CEMENT BASE
338,650	L	ASPHALT CURING SEAL
20	MTN	BLOTTING SAND
*** OR ***		
241,400	MTN	GENERIC PAVING ITEM AGGREGATE BASE COURSE FOR STABILIZATION
*** END SCHEDULE AA ***		
***** BEGIN SCHEDULE HA *****		
***** ( 2 ALTERNATES ) *****		
4	EA	GENERIC SIGNAL ITEM CAMERA WITH INTERNAL LOOP EMULATOR PROCESSING UNIT
*** OR ***		
4	EA	GENERIC SIGNAL ITEM CAMERA WITHOUT INTERNAL LOOP EMULATOR PROCESSING UNIT

1 EA GENERIC SIGNAL ITEM  
EXTERNAL LOOP EMULATOR  
PROCESSING UNIT

\*\*\* END SCHEDULE HA \*\*\*

### CULVERT ITEMS

Lump Sum	LS	CULVERT EXCAVATION, STA ***** (369+15.500 -LREV-)
Lump Sum	LS	CULVERT EXCAVATION, STA ***** (389+42.200 -LREV-)
Lump Sum	LS	CULVERT EXCAVATION, STA ***** (442+07.500 -L-)
Lump Sum	LS	CULVERT EXCAVATION, STA ***** (457+00.00 -L-)
1,026.5	MTN	FOUNDATION CONDITIONING MATERIAL, BOX CULVERT
1,693.6	M3	CLASS A CONCRETE (CULVERT)
128,392	KG	REINFORCING STEEL (CULVERT)

### STRUCTURE ITEMS

Lump Sum	LS	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS AT STA ***** (396+37.050 -LREV-RT)
Lump Sum	LS	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS AT STA ***** (445+88.000 -L-LT)
Lump Sum	LS	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS AT STA ***** (445+88.000 -L-RT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,363+53.676 -LREV-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,408+42.504 -LREV-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,437+50.704 -L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,465+66.727 -L-)
223.6	M	*****MM DIA DRILLED PIERS IN SOIL (1220MM)
115.1	M	*****MM DIA DRILLED PIERS IN SOIL (1372MM)
144	M	*****MM DIA DRILLED PIERS NOT IN SOIL (1220MM)
70.5	M	*****MM DIA DRILLED PIERS NOT IN SOIL (1372MM)
78.6	M	PERMANENT STEEL CASING FOR *****MM DRILLED PIER (1220MM)
67.5	M	PERMANENT STEEL CASING FOR *****MM DRILLED PIER (1372MM)
8	EA	SID INSPECTION
8	EA	SPT TESTING
14	EA	CROSSHOLE SONIC LOGGING
2,394.8	M	CSL TUBES
20,550.5	M2	REINFORCED CONCRETE DECK SLAB
18,285.2	M2	GROOVING BRIDGE FLOORS
2,006.8	M3	CLASS A CONCRETE (BRIDGE)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (353+71.453 -L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (353+72.854 -L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (363+53.676 -LREV-)

Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (396+37.050 -LREV-LT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (396+37.050 -LREV-RT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (408+42.504 -LREV-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (437+50.704 -L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (445+88.000 -L-LT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (445+88.000 -L-RT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (465+66.727 -L-)
232,663	KG	REINFORCING STEEL (BRIDGE)
37,193	KG	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)
2,296	M	MODIFIED 1600MM PRESTRESSED CONC GIRDERS
1,571.52	M	MODIFIED 1829MM PRESTRESSED CONC GIRDERS
2,469,900	LS	APPROX ..... KG STRUCTURAL STEEL
1,934	M	HP310X79 STEEL PILES
700	M	HP360X108 STEEL PILES
36	EA	STEEL PILE POINTS
143.282	M	THREE BAR METAL RAIL
2,046.133	M	CONCRETE BARRIER RAIL
2,067	M2	100MM SLOPE PROTECTION
4,222	MTN	PLAIN RIP RAP CLASS II (600MM THICK)
4,303	M2	FILTER FABRIC FOR DRAINAGE
Lump Sum	LS	POT BEARINGS
Lump Sum	LS	ELASTOMERIC BEARINGS
Lump Sum	LS	EVAZOTE JOINT SEALS
Lump Sum	LS	EXPANSION JOINT SEALS
Lump Sum	LS	MODULAR EXPANSION JOINT SEALS
Lump Sum	LS	ELECTRICAL CONDUIT SYSTEM, STA ***** (353+71.453 -L-)
Lump Sum	LS	ELECTRICAL CONDUIT SYSTEM, STA ***** (353+72.854 -L-)
Lump Sum	LS	ELECTRICAL CONDUIT SYSTEM, STA ***** (396+37.050 -LREV-RT)
Lump Sum	LS	ELECTRICAL CONDUIT SYSTEM, STA ***** (445+88 -L-RT)
38	M	GENERIC STRUCTURE ITEM PILE EXCAVATION IN SOIL
19	M	GENERIC STRUCTURE ITEM PILE EXCAVATION NOT IN SOIL

## STATE FUNDED PROPOSAL, CONTRACTOR LICENSE REQUIRED TO BID

L030722 004

CONTRACT ID : C200739 34398.3.10

DIV OFFICE ABERDEEN

LENGTH = 6.925 KM

COUNTY : MONTGOMERY, RICHMOND

WIDENING, GRADING, DRAINAGE, PAVING &amp; STRUCTURES.

MBE GOAL 10.0% WBE 5.0% COMPLETION DATE : DEC 31 2006

US-220 BYPASS FROM NORTH OF NC-73 TO SOUTH OF SR-1524.

ROADWAY ITEMS					
			8	EA	***MM BIT COAT CS PIPE ELBOWS, TYPE B ****MM THICK (300MM, 1.63MM)
Lump Sum	LS	MOBILIZATION	10	EA	400MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK
Lump Sum	LS	CONSTRUCTION SURVEYING	3	EA	600MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK
Lump Sum	LS	FIELD OFFICE	1	EA	800MM BIT COAT CS PIPE ELBOWS, TYPE B 2.01MM THICK
Lump Sum	LS	CLEARING & GRUBBING ... HEC-TARE(S)	150	M	PIPE REMOVAL
1.6	HA	SUPPLEMENTARY CLEARING & GRUBBING	250	M2	150MM SLOPE PROTECTION
7	EA	SEALING ABANDONED WELLS	Lump Sum	LS	FINE GRADING
1,131,100	M3	UNCLASSIFIED EXCAVATION	120,100	MTN	AGGREGATE BASE COURSE
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (12+48.918 -Y2-)	250	MTN	INCIDENTAL STONE BASE
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (14+49.938 -Y4-)	46,000	M3	SHOULDER BORROW
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (16+65.497 -Y-)	45,000	L	PRIME COAT
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (190+86.913 -L- RT)	1,200	M2	INCIDENTAL MILLING
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (190+90.632 -L- LT)	1,800	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0B
2,800	M3	UNDERCUT EXCAVATION	27,600	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0C
600	MTN	CLASS IV SUBGRADE STABILIZATION	6,000	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B
28,800	M3	DRAINAGE DITCH EXCAVATION	27,100	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C
430	M	BERM DITCH CONSTRUCTION	10,700	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5B
12,400	M2	REMOVAL OF EXISTING ASPHALT PAVEMENT	27,000	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5C
2,600	M2	BREAKING OF EXISTING ASPHALT PAVEMENT	3,515	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22
60	HR	PROOF ROLLING	1,755	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 70-22
1,000	M3	SELECT GRANULAR MATERIAL	570	MTN	ASPHALT PLANT MIX PAVEMENT REPAIR
1,600	M2	FABRIC FOR SOIL STABILIZATION	28,000	M	MILLED RUMBLE STRIPS
1,300	M3	GENERIC GRADING ITEM SELECT GRANULAR MATERIAL FOR TEMPORARY FABRIC WALL	139	EA	RIGHT OF WAY MARKERS
5,400	M2	GENERIC GRADING ITEM FABRIC FOR TEMPORARY FABRIC WALL	390	M3	SUBDRAIN EXCAVATION
1,545	MTN	FOUNDATION CONDITIONING MATERIAL, MINOR STRS	290	M3	SUBDRAIN FINE AGGREGATE
235.2	M	375MM SIDE DRAIN PIPE	700	M	150MM PERFORATED SUBDRAIN PIPE
12	M	450MM SIDE DRAIN PIPE	70	EA	150MM SUBDRAIN PIPE WYES, TEES, & ELBOWS
922.8	M	375MM RC PIPE CULVERTS, CLASS III	5	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET
980.4	M	450MM RC PIPE CULVERTS, CLASS III	10	M	150MM OUTLET PIPE (SUBDRAINS)
1,273.2	M	600MM RC PIPE CULVERTS, CLASS III	1,800	M	SHOULDER DRAIN
552	M	750MM RC PIPE CULVERTS, CLASS III	1,800	M	100MM SHOULDER DRAIN PIPE
592.8	M	900MM RC PIPE CULVERTS, CLASS III	120	M	100MM OUTLET PIPE (SHOULDER DRAINS)
102	M	****MM RC PIPE CULVERTS, CLASS IV (900MM)	15	EA	CONCRETE PAD FOR SHOULDER DRAIN PIPE OUTLET
31.2	M	450MM CS PIPE CULVERTS, 1.63MM THICK	10.4	M3	ENDWALLS
32.4	M	300MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	2.71	M3	PIPE COLLARS
63.6	M	400MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	77	EA	MASONRY DRAINAGE STRUCTURES
33.6	M	600MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	15.36	M	MASONRY DRAINAGE STRUCTURES
21.6	M	800MM BIT COAT CS PIPE CULVERTS, TYPE B 2.01MM THICK	7	EA	FRAME WITH GRATE, STD 840.22
52.8	M	900MM BIT COAT CS PIPE CULVERTS, TYPE B 2.01MM THICK	7	EA	FRAME WITH TWO GRATES, STD 840.**** (840.20)
			56	EA	FRAME WITH TWO GRATES, STD 840.22
			13	EA	FRAME WITH TWO GRATES, STD 840.29
			1	EA	FRAME WITH COVER, STD 840.54
			4	EA	****MM SLUICE GATE (900MM)
			1,610	M	SHOULDER BERM GUTTER
			3	EA	MODIFIED CONCRETE FLUME
			350	M	CONCRETE EXPRESSWAY GUTTER
			80	M2	100MM CONCRETE PAVED DITCH
			270	M2	125MM MONOLITHIC CONCRETE ISLANDS (SURFACE MOUNTED)



			60,688	M	PAINT PAVEMENT MARKING LINES (100MM)
			20	M	PAINT PAVEMENT MARKING LINES (600MM)
			8	EA	PAINT PAVEMENT MARKING SYMBOL
4,236.72	M	STEEL BM GUARDRAIL	1,000	M	REMOVAL OF PAVEMENT MARKING LINES (100MM)
58.35	M	STEEL BM GUARDRAIL, SHOP CURVED	480	EA	PERMANENT RAISED PAVEMENT MARKERS
2	EA	STEEL BM GUARDRAIL TERMINAL SECTIONS	9	EA	2.1M U-CHANNEL POSTS
10	EA	ADDITIONAL GUARDRAIL POSTS	50	EA	FLEXIBLE DELINEATORS (CRYSTAL)
1	EA	GUARDRAIL ANCHOR UNITS, TYPE AT-1	20	EA	FLEXIBLE DELINEATORS (YELLOW)
6	EA	GUARDRAIL ANCHOR UNITS, TYPE CAT-1	24	EA	FLEXIBLE DELINEATORS (CRYSTAL & RED)
16	EA	GUARDRAIL ANCHOR UNITS, TYPE III	24	EA	FLEXIBLE DELINEATORS (YELLOW & RED)
27	EA	GUARDRAIL ANCHOR UNITS, TYPE 350	9	EA	OBJECT MARKERS (END OF ROAD)
2	EA	GUARDRAIL ANCHOR UNITS, TYPE M-350	65	MTN	FOUNDATION CONDITIONING MATERIAL, UTILITIES CLASS ***** (I)
6,000	M	DOUBLE FACED CABLE GUIDERAIL	65	MTN	BEDDING MATERIAL, UTILITIES CLASS ***** (I)
26	EA	CABLE GUIDERAIL ANCHOR UNITS	2	MTN	PAVEMENT REPAIR FOR UTILITY WORK
16,800	M	WOVEN WIRE FENCE, 1200MM FABRIC	6.5	M	150MM DI WATER PIPE, PC 2.41MPA
920	EA	100MM TIMBER FENCE POSTS, 2.30M LONG	125	M	200MM DI WATER PIPE, PC 2.41MPA
590	EA	125MM TIMBER FENCE POSTS, 2.50M LONG	30	M	20MM COPPER WATER PIPE, TYPE K
150	M	ADDITIONAL BARBED WIRE	1,347	M	200MM PVC WATER PIPE, SDR 21, 1.38MPA WP
100	MTN	PLAIN RIP RAP, CLASS I	1,131	KG	DUCTILE IRON WATER PIPE FITTINGS, 1.72MPA MIN WP
3,000	MTN	PLAIN RIP RAP, CLASS B	1	EA	20MM CORPORATION STOP
7,350	M2	FILTER FABRIC FOR DRAINAGE	2	EA	150MM GATE VALVE & VALVE BOX, 1.38MPA WP (1.38MPA)
3	EA	PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON	5	EA	200MM GATE VALVE & VALVE BOX, *****MPA WP (1.38MPA)
7	M3	REINFORCED CONCRETE SIGN FOOTINGS	1	EA	*** X ***MM TAPPING SADDLE (200MM X 20MM)
2	M3	PLAIN CONCRETE SIGN FOOTINGS	2	EA	RELOCATE EXISTING FIRE HYDRANT
2,467	KG	SUPPORTS, BREAKAWAY STEEL BEAM	1	EA	GENERIC UTILITY ITEM INSTALL WATER METER
1,517	KG	SUPPORTS, SIMPLE STEEL BEAM	850	M	TEMPORARY SILT FENCE
499	M	SUPPORTS, 4.5KG STEEL U-CHANNEL	350	MTN	STONE FOR EROSION CONTROL, CLASS A
10	EA	SUPPORTS, 3KG STEEL U-CHANNEL	6,200	MTN	STONE FOR EROSION CONTROL, CLASS B
8	EA	SIGN ERECTION, TYPE D	2,500	MTN	SEDIMENT CONTROL STONE
46	EA	SIGN ERECTION, TYPE E	116.5	HA	TEMPORARY MULCHING
10	EA	SIGN ERECTION, TYPE F	4,700	KG	SEED FOR TEMPORARY SEEDING
13	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (A)	37.75	MTN	FERTILIZER FOR TEMPORARY SEEDING
10	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (B)	740	M	TEMPORARY SLOPE DRAINS
10	EA	SIGN ERECTION, MILEMARKERS	72	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS
22	M2	WORK ZONE SIGNS (STATIONARY)	107,500	M3	SILT EXCAVATION
27	M2	WORK ZONE SIGNS (PORTABLE)	4,350	M2	SYNTHETIC ROVING
10	M2	WORK ZONE SIGNS (BARRICADE MOUNTED)	2,175	M2	MATTING FOR EROSION CONTROL
125	EA	DRUMS	700	M2	PERMANENT SOIL REINFORCEMENT MAT
60	EA	CONES	85	M	6.4MM HARDWARE CLOTH
20	M	BARRICADES (TYPE II)	2	EA	***X***X***MM PERFORATED CS PIPE TEE RISER, 1.63MM THICK (450MM X 450MM X 450MM)
40	M	BARRICADES (TYPE III)	1	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (800MM X 800MM X 800MM)
480	HR	FLAGGER	2	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (900MM X 900MM X 900MM)
2	EA	WARNING LIGHTS (TYPE B)	112	HA	SEEDING & MULCHING
2	EA	TEMPORARY CRASH CUSHIONS	65.5	HA	MOWING
1	EA	TRUCK MOUNTED IMPACT ATTENUATOR (45 MPH)	1,425	KG	SEED FOR REPAIR SEEDING
220	M	PORTABLE CONCRETE BARRIER (DRAINAGE)	4.75	MTN	FERTILIZER FOR REPAIR SEEDING
100	EA	TEMPORARY RAISED PAVEMENT MARKERS	3,150	KG	SEED FOR SUPPLEMENTAL SEEDING
7,302	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 2.3MM)	188.25	MTN	FERTILIZER TOPDRESSING
6,462	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 3.1MM)	26	HR	SPECIALIZED HAND MOWING
28,000	M	THERMOPLASTIC PAVEMENT MARKING LINES (150MM, 2.3MM)	32	EA	RESPONSE FOR EROSION CONTROL
3,580	M	THERMOPLASTIC PAVEMENT MARKING LINES (150MM, 3.1MM)	7	HA	REFORESTATION
100	M	THERMOPLASTIC PAVEMENT MARKING LINES (200MM, 2.3MM)			
450	M	THERMOPLASTIC PAVEMENT MARKING LINES (300MM, 2.3MM)			
40	M	THERMOPLASTIC PAVEMENT MARKING LINES (600MM, 3.1MM)			
38	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (2.3MM)			

0.5 HA GENERIC EROSION CONTROL ITEM  
SPECIALIZED SEEDING UNDER  
GUIDERAIL  
AND GUARDRAIL (CENTIPEDE)

### STRUCTURE ITEMS

Lump Sum	LS	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS AT STA ***** (190+89.000 -L-LT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,181+85.000 -L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,190+89.000 -L-LT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,190+89.000 -L-RT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,199+75.000 -L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,238+35.000 -L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (4,190+89.000 -L-RT)
6,577.2	M2	REINFORCED CONCRETE DECK SLAB
5,664.2	M2	GROOVING BRIDGE FLOORS
1,117.8	M3	CLASS A CONCRETE (BRIDGE)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (181+85.000 -L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (190+89.000 -L-LT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (190+89.000 -L-RT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (199+75.000 -L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (238+35.000 -L-)
103,074	KG	REINFORCING STEEL (BRIDGE)
11,964	KG	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)
1,311.25	M	1372MM PRESTRESSED CONCRETE GIRDERS
368,300	LS	APPROX ..... KG STRUCTURAL STEEL
5,454	M	HP310X79 STEEL PILES
Lump Sum	LS	GALVANIZING STEEL PILES AT STA ***** (190+89.000 -L-LT)
Lump Sum	LS	GALVANIZING STEEL PILES AT STA ***** (190+89.000 -L-RT)
966.754	M	CONCRETE BARRIER RAIL
1,049	M2	100MM SLOPE PROTECTION
4,245	MTN	PLAIN RIP RAP CLASS B
3,216	M2	FILTER FABRIC FOR DRAINAGE
Lump Sum	LS	POT BEARINGS
Lump Sum	LS	ELASTOMERIC BEARINGS
Lump Sum	LS	EVAZOTE JOINT SEALS

## STATE FUNDED PROPOSAL, CONTRACTOR LICENSE REQUIRED TO BID

L030722 005

CONTRACT ID : C200279 34398.3.11

DIV OFFICE ABERDEEN

LENGTH = 4.446 KM

COUNTY : MONTGOMERY

WIDENING, GRADING, DRAINAGE, PAVING &amp; STRUCTURES.

MBE GOAL 10.0% WBE 5.0% COMPLETION DATE : DEC 31 2006

US-220 BYPASS FROM SOUTH OF SR-1524 TO EXISTING 4 LANES NORTH OF US-220 ALT.

ROADWAY ITEMS						
			321.2	M	PIPE REMOVAL	
			Lump Sum	LS	FINE GRADING	
			250	KG	SEALING EXISTING PAVEMENT CRACKS	
Lump Sum	LS	MOBILIZATION				
Lump Sum	LS	CONSTRUCTION SURVEYING	5,000	M2	LIME TREATED SOIL (QUICKLIME)	
Lump Sum	LS	CLEARING & GRUBBING ... HEC-TARE(S)	50	MTN	LIME FOR LIME TREATED SOIL	
			80,900	MTN	AGGREGATE BASE COURSE	
2	HA	SUPPLEMENTARY CLEARING & GRUB-BING	500	MTN	INCIDENTAL STONE BASE	
			34,600	L	PRIME COAT	
669,900	M3	UNCLASSIFIED EXCAVATION	880	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0B	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (15+00.000-Y1-)	21,260	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0C	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (15+00.900-Y2-)	3,690	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	
21,320	M3	UNDERCUT EXCAVATION	14,025	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	
600	MTN	CLASS IV SUBGRADE STABILIZA-TION	8,540	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	
136,200	M3	BORROW EXCAVATION	18,110	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	
2,250	M3	DRAINAGE DITCH EXCAVATION				
860	M	BERM DITCH CONSTRUCTION	2,340	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22	
23,775	M2	REMOVAL OF EXISTING ASPHALT PAVEMENT	1,178	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 70-22	
4,475	M2	BREAKING OF EXISTING ASPHALT PAVEMENT	250	MTN	ASPHALT PLANT MIX PAVEMENT REPAIR	
28	HR	PROOF ROLLING				
1,000	M3	SELECT GRANULAR MATERIAL	17,850	M	MILLED RUMBLE STRIPS	
1,600	M2	FABRIC FOR SOIL STABILIZATION	90	EA	RIGHT OF WAY MARKERS	
1,320	MTN	FOUNDATION CONDITIONING MATE-RIAL, MINOR STRS	415	M3	SUBDRAIN EXCAVATION	
			210	M3	SUBDRAIN FINE AGGREGATE	
22.8	M	375MM SIDE DRAIN PIPE	500	M	150MM PERFORATED SUBDRAIN PIPE	
24	M	450MM SIDE DRAIN PIPE	50	EA	150MM SUBDRAIN PIPE WYES, TEES, & ELBOWS	
973.2	M	375MM RC PIPE CULVERTS, CLASS III	4	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET	
			8	M	150MM OUTLET PIPE (SUBDRAINS)	
750	M	450MM RC PIPE CULVERTS, CLASS III	1,500	M	SHOULDER DRAIN	
1,069.2	M	600MM RC PIPE CULVERTS, CLASS III	1,500	M	100MM SHOULDER DRAIN PIPE	
338.4	M	750MM RC PIPE CULVERTS, CLASS III	150	M	100MM OUTLET PIPE (SHOULDER DRAINS)	
129.6	M	1050MM RC PIPE CULVERTS, CLASS III	6	EA	CONCRETE PAD FOR SHOULDER DRAIN PIPE OUTLET	
96	M	1350MM RC PIPE CULVERTS, CLASS III	3.4	M3	ENDWALLS	
210	M	****MM RC PIPE CULVERTS, CLASS IV (1500MM)	12.4	M3	REINFORCED ENDWALLS	
			2	M3	PIPE COLLARS	
79.2	M	****MM RC PIPE CULVERTS, CLASS IV (450MM)	1	M3	PIPE PLUGS	
			97	EA	MASONRY DRAINAGE STRUCTURES	
114	M	400MM CS PIPE CULVERTS, 1.63MM THICK	2.07	M	MASONRY DRAINAGE STRUCTURES	
20.4	M	450MM CS PIPE CULVERTS, 1.63MM THICK	2	EA	FRAME WITH GRATE, STD 840.22	
			19	EA	FRAME WITH TWO GRATES, STD 840.**** (840.20)	
14.4	M	***MM BIT COAT CS PIPE CUL-VERTS, TYPE B ****MM THICK (150MM, 1.63MM)	3	EA	FRAME WITH TWO GRATES, STD 840.16	
			67	EA	FRAME WITH TWO GRATES, STD 840.22	
233.8	M	400MM BIT COAT CS PIPE CUL-VERTS, TYPE B 1.63MM THICK	5	EA	FRAME WITH COVER, STD 840.54	
70.8	M	450MM BIT COAT CS PIPE CUL-VERTS, TYPE B 1.63MM THICK	1,275	M	SHOULDER BERM GUTTER	
48	M	600MM BIT COAT CS PIPE CUL-VERTS, TYPE B 1.63MM THICK	95	M2	100MM CONCRETE PAVED DITCH	
			685	M2	125MM MONOLITHIC CONCRETE IS-LANDS (KEYED IN)	
27.6	M	800MM BIT COAT CS PIPE CUL-VERTS, TYPE B 2.01MM THICK	2	EA	CONVERT EXISTING DROP INLET TO JUNCTION BOX	
22	EA	400MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK	1	EA	CONVERT EXISTING JUNCTION BOX TO DROP INLET	
4	EA	450MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK	3,173.73	M	STEEL BM GUARDRAIL	
6	EA	600MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK	2	EA	STEEL BM GUARDRAIL TERMINAL SECTIONS	
2	EA	800MM BIT COAT CS PIPE ELBOWS, TYPE B 2.01MM THICK	10	EA	ADDITIONAL GUARDRAIL POSTS	
			6	EA	GUARDRAIL ANCHOR UNITS, TYPE CAT-1	

			500	M	REMOVAL OF PAVEMENT MARKING LINES (100MM)
			624	EA	PERMANENT RAISED PAVEMENT MARKERS
			12	EA	2.1M U-CHANNEL POSTS
			100	EA	FLEXIBLE DELINEATORS (CRYSTAL)
			40	EA	FLEXIBLE DELINEATORS (YELLOW)
			50	EA	FLEXIBLE DELINEATORS (CRYSTAL & RED)
			50	EA	FLEXIBLE DELINEATORS (YELLOW & RED)
			12	EA	OBJECT MARKERS (END OF ROAD)
			10	MTN	FOUNDATION CONDITIONING MATERIAL, UTILITIES CLASS ***** (I)
			10	MTN	BEDDING MATERIAL, UTILITIES CLASS ***** (I)
			187	M	300MM PVC WATER PIPE, SDR 21, 1.38MPA WP
			390	KG	DUCTILE IRON WATER PIPE FITTINGS, 1.72MPA MIN WP
			1	EA	***MM BLOW OFF ASSEMBLY (50MM)
			82	M	***MM STEEL ENCASEMENT PIPE, ****MM THICK, BY OPEN CUT (300MM, 5.00MM)
			2,200	M	TEMPORARY SILT FENCE
			700	MTN	STONE FOR EROSION CONTROL, CLASS A
			8,800	MTN	STONE FOR EROSION CONTROL, CLASS B
			3,900	MTN	SEDIMENT CONTROL STONE
			57.5	HA	TEMPORARY MULCHING
			2,350	KG	SEED FOR TEMPORARY SEEDING
			19	MTN	FERTILIZER FOR TEMPORARY SEEDING
			800	M	TEMPORARY SLOPE DRAINS
			58	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS
			46,150	M3	SILT EXCAVATION
			4,400	M2	SYNTHETIC ROVING
			2,200	M2	MATTING FOR EROSION CONTROL
			580	M2	PERMANENT SOIL REINFORCEMENT MAT
			300	M	6.4MM HARDWARE CLOTH
			150	M3	STILLING BASINS
			56	HA	SEEDING & MULCHING
			32.5	HA	MOWING
			700	KG	SEED FOR REPAIR SEEDING
			2.25	MTN	FERTILIZER FOR REPAIR SEEDING
			1,575	KG	SEED FOR SUPPLEMENTAL SEEDING
			94.25	MTN	FERTILIZER TOPDRESSING
			0.07	HA	SPECIALIZED SEEDING UNDER GUIDERAIL & GUARDRAIL (CENTIPEDE)
			20	M	IMPERVIOUS DIKE
			4	HR	SPECIALIZED HAND MOWING
			24	EA	RESPONSE FOR EROSION CONTROL
			125	M3	CULVERT DIVERSION CHANNEL
			4	HA	REFORESTATION
			0.25	HA	STREAMBANK REFORESTATION
			61	EA	GENERIC EROSION CONTROL ITEM ROOTWADS
			1,300	M2	GENERIC EROSION CONTROL ITEM COIR FIBER MAT
			120	M	SIGNAL CABLE
			3	EA	VEHICLE SIGNAL HEAD (300MM, 3 SECTION)
			3	EA	VEHICLE SIGNAL HEAD (300MM, 5 SECTION)
			122	M	MESSENGER CABLE (9.52MM)
			55	M	TRENCHING (UNPAVED)
			3	EA	JUNCTION BOX (STANDARD SIZE)
			4	EA	WOOD POLE
			6	EA	GUY ASSEMBLY
			1	EA	25MM RISER WITH WEATHERHEAD
			4	EA	50MM RISER WITH WEATHERHEAD
			188	M	INDUCTIVE LOOP SAWCUT
			268	M	LEAD-IN CABLE
			1	EA	CONTROLLER WITH CABINET (TYPE 2070L, POLE MOUNTED)
			4	EA	DETECTOR CHANNEL (TYPE 2070L)
4	EA	GUARDRAIL ANCHOR UNITS, TYPE III			
17	EA	GUARDRAIL ANCHOR UNITS, TYPE 350			
156.21	M	REMOVE EXISTING GUARDRAIL			
11.43	M	TEMPORARY STEEL BM GUARDRAIL			
2	EA	TEMPORARY STEEL BM GUARDRAIL, TERMINAL SECTIONS			
4,504.6	M	CABLE GUIDERAIL			
18	EA	CABLE GUIDERAIL ANCHOR UNITS			
7,725	M	WOVEN WIRE FENCE, 1200MM FABRIC			
1,655	EA	100MM TIMBER FENCE POSTS, 2.30M LONG			
295	EA	125MM TIMBER FENCE POSTS, 2.50M LONG			
300	M	ADDITIONAL BARBED WIRE			
200	MTN	PLAIN RIP RAP, CLASS I			
770	MTN	PLAIN RIP RAP, CLASS B			
3,150	M2	FILTER FABRIC FOR DRAINAGE			
6	EA	PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON			
35	MTN	GENERIC EROSION CONTROL ITEM BOULDERS			
12	M3	REINFORCED CONCRETE SIGN FOOTINGS			
1	M3	PLAIN CONCRETE SIGN FOOTINGS			
3,959	KG	SUPPORTS, BREAKAWAY STEEL BEAM			
3,174	KG	SUPPORTS, SIMPLE STEEL BEAM			
600	M	SUPPORTS, 4.5KG STEEL U-CHANNEL			
8	EA	SUPPORTS, 3KG STEEL U-CHANNEL			
12	EA	SIGN ERECTION, TYPE D			
55	EA	SIGN ERECTION, TYPE E			
24	EA	SIGN ERECTION, TYPE F			
10	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED)			
5	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED)			
8	EA	SIGN ERECTION, MILEMARKERS			
27	EA	DISPOSAL OF SIGN SYSTEM, U-CHANNEL			
58	M2	WORK ZONE SIGNS (STATIONARY)			
40	M2	WORK ZONE SIGNS (PORTABLE)			
17	M2	WORK ZONE SIGNS (BARRICADE MOUNTED)			
2	EA	FLASHING ARROW PANELS, TYPE C			
2	EA	CHANGEABLE MESSAGE SIGNS			
3	EA	WARNING FLAG SETS			
120	EA	DRUMS			
50	EA	CONES			
80	M	BARRICADES (TYPE III)			
2,160	HR	FLAGGER			
7	EA	WARNING LIGHTS (TYPE B)			
2	EA	TRUCK MOUNTED IMPACT ATTENUATOR (60 MPH)			
162	EA	TEMPORARY RAISED PAVEMENT MARKERS			
12,540	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 2.3MM)			
11,110	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 3.1MM)			
17,600	M	THERMOPLASTIC PAVEMENT MARKING LINES (150MM, 2.3MM)			
2,400	M	THERMOPLASTIC PAVEMENT MARKING LINES (150MM, 3.1MM)			
540	M	THERMOPLASTIC PAVEMENT MARKING LINES (200MM, 2.3MM)			
1,000	M	THERMOPLASTIC PAVEMENT MARKING LINES (300MM, 2.3MM)			
16	M	THERMOPLASTIC PAVEMENT MARKING LINES (600MM, 3.1MM)			
54	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (2.3MM)			
46,130	M	PAINT PAVEMENT MARKING LINES (100MM)			
160	M	PAINT PAVEMENT MARKING LINES (200MM)			
68	M	PAINT PAVEMENT MARKING LINES (600MM)			
40	EA	PAINT PAVEMENT MARKING SYMBOL			

**CULVERT ITEMS**

Lump Sum	LS	CULVERT EXCAVATION, STA ***** (255+22.00 -L-)
147	MTN	FOUNDATION CONDITIONING MATERIAL, BOX CULVERT
233.6	M3	CLASS A CONCRETE (CULVERT)
15,125	KG	REINFORCING STEEL (CULVERT)

**STRUCTURE ITEMS**

Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,245+73.259 -L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,276+55.853 -L-)
2,510.6	M2	REINFORCED CONCRETE DECK SLAB
2,053.4	M2	GROOVING BRIDGE FLOORS
334.1	M3	CLASS A CONCRETE (BRIDGE)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (245+73.259 -L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (276+55.853 -L-)
36,372	KG	REINFORCING STEEL (BRIDGE)
1,586	KG	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)
379,500	LS	APPROX ..... KG STRUCTURAL STEEL
2,990	M	HP310X79 STEEL PILES
297.912	M	CONCRETE BARRIER RAIL
932	M2	100MM SLOPE PROTECTION
Lump Sum	LS	POT BEARINGS
Lump Sum	LS	EVAZOTE JOINT SEALS

## STATE FUNDED PROPOSAL, CONTRACTOR LICENSE REQUIRED TO BID

L030722 006

CONTRACT ID : C200874 34398.3.10

DIV OFFICE ABERDEEN

LENGTH = 11.371 KM

COUNTY : MONTGOMERY, RICHMOND

WIDENING, GRADING, DRAINAGE, PAVING &amp; STRUCTURES.

MBE GOAL 10.0% WBE 5.0% COMPLETION DATE : DEC 31 2006

US-220 BYPASS FROM NORTH OF NC-73 TO EXISTING 4 LANES NORTH OF US-220 ALTERNATE.

ROADWAY ITEMS						
			102	M	****MM RC PIPE CULVERTS, CLASS IV (900MM)	
Lump Sum	LS	MOBILIZATION				
			114	M	400MM CS PIPE CULVERTS, 1.63MM THICK	
Lump Sum	LS	CONSTRUCTION SURVEYING				
Lump Sum	LS	FIELD OFFICE	51.6	M	450MM CS PIPE CULVERTS, 1.63MM THICK	
Lump Sum	LS	CLEARING & GRUBBING ... HEC-TARE(S)				
3.6	HA	SUPPLEMENTARY CLEARING & GRUBBING	14.4	M	***MM BIT COAT CS PIPE CULVERTS, TYPE B ****MM THICK (150MM, 1.63MM)	
7	EA	SEALING ABANDONED WELLS	32.4	M	300MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	
1,801,000	M3	UNCLASSIFIED EXCAVATION	297.4	M	400MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (12+48.918 -Y2-)	70.8	M	450MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (14+49.938 -Y4-)	81.6	M	600MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (15+00.000-Y1-)	49.2	M	800MM BIT COAT CS PIPE CULVERTS, TYPE B 2.01MM THICK	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (15+00.900-Y2-)	52.8	M	900MM BIT COAT CS PIPE CULVERTS, TYPE B 2.01MM THICK	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (16+65.497 -Y-)	8	EA	***MM BIT COAT CS PIPE ELBOWS, TYPE B ****MM THICK (300MM, 1.63MM)	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (190+86.913 -L- RT)	32	EA	400MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (190+90.632 -L- LT)	4	EA	450MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK	
24,120	M3	UNDERCUT EXCAVATION	9	EA	600MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK	
1,200	MTN	CLASS IV SUBGRADE STABILIZATION	3	EA	800MM BIT COAT CS PIPE ELBOWS, TYPE B 2.01MM THICK	
31,050	M3	DRAINAGE DITCH EXCAVATION	471.2	M	PIPE REMOVAL	
1,290	M	BERM DITCH CONSTRUCTION	250	M2	150MM SLOPE PROTECTION	
36,175	M2	REMOVAL OF EXISTING ASPHALT PAVEMENT	Lump Sum	LS	FINE GRADING	
7,075	M2	BREAKING OF EXISTING ASPHALT PAVEMENT	250	KG	SEALING EXISTING PAVEMENT CRACKS	
88	HR	PROOF ROLLING	5,000	M2	LIME TREATED SOIL (QUICKLIME)	
2,000	M3	SELECT GRANULAR MATERIAL	50	MTN	LIME FOR LIME TREATED SOIL	
3,200	M2	FABRIC FOR SOIL STABILIZATION	201,000	MTN	AGGREGATE BASE COURSE	
1,300	M3	GENERIC GRADING ITEM SELECT GRANULAR MATERIAL FOR TEMPORARY FABRIC WALL	750	MTN	INCIDENTAL STONE BASE	
5,400	M2	GENERIC GRADING ITEM FABRIC FOR TEMPORARY FABRIC WALL	52,153	M3	SHOULDER BORROW	
2,865	MTN	FOUNDATION CONDITIONING MATERIAL, MINOR STRS	79,600	L	PRIME COAT	
258	M	375MM SIDE DRAIN PIPE	1,200	M2	INCIDENTAL MILLING	
36	M	450MM SIDE DRAIN PIPE	2,680	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0B	
1,896	M	375MM RC PIPE CULVERTS, CLASS III	48,860	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0C	
1,730.4	M	450MM RC PIPE CULVERTS, CLASS III	9,690	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	
2,342.4	M	600MM RC PIPE CULVERTS, CLASS III	41,125	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	
890.4	M	750MM RC PIPE CULVERTS, CLASS III	19,240	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	
592.8	M	900MM RC PIPE CULVERTS, CLASS III	45,110	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	
129.6	M	1050MM RC PIPE CULVERTS, CLASS III	5,855	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22	
96	M	1350MM RC PIPE CULVERTS, CLASS III	2,933	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 70-22	
210	M	****MM RC PIPE CULVERTS, CLASS IV (1500MM)	820	MTN	ASPHALT PLANT MIX PAVEMENT REPAIR	
79.2	M	****MM RC PIPE CULVERTS, CLASS IV (450MM)	45,850	M	MILLED RUMBLE STRIPS	
			229	EA	RIGHT OF WAY MARKERS	
			805	M3	SUBDRAIN EXCAVATION	
			500	M3	SUBDRAIN FINE AGGREGATE	
			1,200	M	150MM PERFORATED SUBDRAIN PIPE	
			120	EA	150MM SUBDRAIN PIPE WYES, TEES, & ELBOWS	
			9	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET	
			18	M	150MM OUTLET PIPE (SUBDRAINS)	
			3,300	M	SHOULDER DRAIN	

3,300	M	100MM SHOULDER DRAIN PIPE	20	EA	SIGN ERECTION, TYPE D
270	M	100MM OUTLET PIPE (SHOULDER DRAINS)	101	EA	SIGN ERECTION, TYPE E
21	EA	CONCRETE PAD FOR SHOULDER DRAIN PIPE OUTLET	34	EA	SIGN ERECTION, TYPE F
13.8	M3	ENDWALLS	23	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (A)
12.4	M3	REINFORCED ENDWALLS	15	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (B)
4.71	M3	PIPE COLLARS	18	EA	SIGN ERECTION, MILEMARKERS
1	M3	PIPE PLUGS	27	EA	DISPOSAL OF SIGN SYSTEM, U-CHANNEL
174	EA	MASONRY DRAINAGE STRUCTURES	80	M2	WORK ZONE SIGNS (STATIONARY)
17.43	M	MASONRY DRAINAGE STRUCTURES	67	M2	WORK ZONE SIGNS (PORTABLE)
9	EA	FRAME WITH GRATE, STD 840.22	27	M2	WORK ZONE SIGNS (BARRICADE MOUNTED)
26	EA	FRAME WITH TWO GRATES, STD 840.**** (840.20)	2	EA	FLASHING ARROW PANELS, TYPE C
3	EA	FRAME WITH TWO GRATES, STD 840.16	2	EA	CHANGEABLE MESSAGE SIGNS
123	EA	FRAME WITH TWO GRATES, STD 840.22	3	EA	WARNING FLAG SETS
13	EA	FRAME WITH TWO GRATES, STD 840.29	245	EA	DRUMS
6	EA	FRAME WITH COVER, STD 840.54	110	EA	CONES
4	EA	***MM SLUICE GATE (900MM)	20	M	BARRICADES (TYPE II)
2,885	M	SHOULDER BERM GUTTER	120	M	BARRICADES (TYPE III)
3	EA	MODIFIED CONCRETE FLUME	2,640	HR	FLAGGER
350	M	CONCRETE EXPRESSWAY GUTTER	9	EA	WARNING LIGHTS (TYPE B)
175	M2	100MM CONCRETE PAVED DITCH	2	EA	TEMPORARY CRASH CUSHIONS
270	M2	125MM MONOLITHIC CONCRETE ISLANDS (SURFACE MOUNTED)	1	EA	TRUCK MOUNTED IMPACT ATTENUATOR (45 MPH)
685	M2	125MM MONOLITHIC CONCRETE ISLANDS (KEYED IN)	2	EA	TRUCK MOUNTED IMPACT ATTENUATOR (60 MPH)
610	M2	GENERIC PAVING ITEM	220	M	PORTABLE CONCRETE BARRIER (DRAINAGE)
		REINFORCED CONC DRIVEWAY	262	EA	TEMPORARY RAISED PAVEMENT MARKERS
2	EA	CONVERT EXISTING DROP INLET TO JUNCTION BOX	19,842	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 2.3MM)
1	EA	CONVERT EXISTING JUNCTION BOX TO DROP INLET	17,572	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 3.1MM)
7,410.45	M	STEEL BM GUARDRAIL	45,600	M	THERMOPLASTIC PAVEMENT MARKING LINES (150MM, 2.3MM)
58.35	M	STEEL BM GUARDRAIL, SHOP CURVED	5,980	M	THERMOPLASTIC PAVEMENT MARKING LINES (150MM, 3.1MM)
4	EA	STEEL BM GUARDRAIL TERMINAL SECTIONS	640	M	THERMOPLASTIC PAVEMENT MARKING LINES (200MM, 2.3MM)
20	EA	ADDITIONAL GUARDRAIL POSTS	1,450	M	THERMOPLASTIC PAVEMENT MARKING LINES (300MM, 2.3MM)
1	EA	GUARDRAIL ANCHOR UNITS, TYPE AT-1	56	M	THERMOPLASTIC PAVEMENT MARKING LINES (600MM, 3.1MM)
12	EA	GUARDRAIL ANCHOR UNITS, TYPE CAT-1	92	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (2.3MM)
20	EA	GUARDRAIL ANCHOR UNITS, TYPE III	106,818	M	PAINT PAVEMENT MARKING LINES (100MM)
44	EA	GUARDRAIL ANCHOR UNITS, TYPE 350	160	M	PAINT PAVEMENT MARKING LINES (200MM)
2	EA	GUARDRAIL ANCHOR UNITS, TYPE M-350	88	M	PAINT PAVEMENT MARKING LINES (600MM)
156.21	M	REMOVE EXISTING GUARDRAIL	48	EA	PAINT PAVEMENT MARKING SYMBOL
11.43	M	TEMPORARY STEEL BM GUARDRAIL	1,500	M	REMOVAL OF PAVEMENT MARKING LINES (100MM)
2	EA	TEMPORARY STEEL BM GUARDRAIL, TERMINAL SECTIONS	1,104	EA	PERMANENT RAISED PAVEMENT MARKERS
4,504.6	M	CABLE GUIDERAIL	21	EA	2.1M U-CHANNEL POSTS
6,000	M	DOUBLE FACED CABLE GUIDERAIL	150	EA	FLEXIBLE DELINEATORS (CRYSTAL)
44	EA	CABLE GUIDERAIL ANCHOR UNITS	60	EA	FLEXIBLE DELINEATORS (YELLOW)
24,525	M	WOVEN WIRE FENCE, 1200MM FABRIC	74	EA	FLEXIBLE DELINEATORS (CRYSTAL & RED)
2,575	EA	100MM TIMBER FENCE POSTS, 2.30M LONG	74	EA	FLEXIBLE DELINEATORS (YELLOW & RED)
885	EA	125MM TIMBER FENCE POSTS, 2.50M LONG	21	EA	OBJECT MARKERS (END OF ROAD)
450	M	ADDITIONAL BARBED WIRE	75	MTN	FOUNDATION CONDITIONING MATERIAL, UTILITIES CLASS ***** (I)
300	MTN	PLAIN RIP RAP, CLASS I	75	MTN	BEDDING MATERIAL, UTILITIES CLASS ***** (I)
3,770	MTN	PLAIN RIP RAP, CLASS B	2	MTN	PAVEMENT REPAIR FOR UTILITY WORK
10,500	M2	FILTER FABRIC FOR DRAINAGE	6.5	M	150MM DI WATER PIPE, PC 2.41MPA
9	EA	PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON	125	M	200MM DI WATER PIPE, PC 2.41MPA
35	MTN	GENERIC EROSION CONTROL ITEM BOULDERS	30	M	20MM COPPER WATER PIPE, TYPE K
19	M3	REINFORCED CONCRETE SIGN FOOTINGS	1,347	M	200MM PVC WATER PIPE, SDR 21, 1.38MPA WP
3	M3	PLAIN CONCRETE SIGN FOOTINGS	187	M	300MM PVC WATER PIPE, SDR 21, 1.38MPA WP
6,426	KG	SUPPORTS, BREAKAWAY STEEL BEAM			
4,691	KG	SUPPORTS, SIMPLE STEEL BEAM			
1,099	M	SUPPORTS, 4.5KG STEEL U-CHANNEL			
18	EA	SUPPORTS, 3KG STEEL U-CHANNEL			

1,521	KG	DUCTILE IRON WATER PIPE FITTINGS, 1.72MPA MIN WP	4	EA	DETECTOR CHANNEL (TYPE 2070L)
1	EA	20MM CORPORATION STOP			
2	EA	150MM GATE VALVE & VALVE BOX, 1.38MPA WP (1.38MPA)			
5	EA	200MM GATE VALVE & VALVE BOX, ****MPA WP (1.38MPA)			
1	EA	*** X ***MM TAPPING SADDLE (200MM X 20MM)	Lump Sum	LS	CULVERT EXCAVATION, STA ***** (255+22.00 -L-)
1	EA	***MM BLOW OFF ASSEMBLY (50MM)	147	MTN	FOUNDATION CONDITIONING MATERIAL, BOX CULVERT
2	EA	RELOCATE EXISTING FIRE HYDRANT	233.6	M3	CLASS A CONCRETE (CULVERT)
82	M	***MM STEEL ENCASEMENT PIPE, ****MM THICK, BY OPEN CUT (300MM, 5.00MM)	15,125	KG	REINFORCING STEEL (CULVERT)
1	EA	GENERIC UTILITY ITEM INSTALL WATER METER			
3,050	M	TEMPORARY SILT FENCE			
1,050	MTN	STONE FOR EROSION CONTROL, CLASS A			
15,000	MTN	STONE FOR EROSION CONTROL, CLASS B			
6,400	MTN	SEDIMENT CONTROL STONE	Lump Sum	LS	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS AT STA ***** (190+89.000 -L-LT)
174	HA	TEMPORARY MULCHING			
7,050	KG	SEED FOR TEMPORARY SEEDING	Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,181+85.000 -L-)
56.75	MTN	FERTILIZER FOR TEMPORARY SEEDING	Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,190+89.000 -L-LT)
1,540	M	TEMPORARY SLOPE DRAINS	Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,190+89.000 -L-RT)
130	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS	Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,199+75.000 -L-)
153,650	M3	SILT EXCAVATION	Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,238+35.000 -L-)
8,750	M2	SYNTHETIC ROVING			
4,375	M2	MATting FOR EROSION CONTROL	Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,276+55.853 -L-)
1,280	M2	PERMANENT SOIL REINFORCEMENT MAT	Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (4,190+89.000 -L-RT)
385	M	6.4MM HARDWARE CLOTH	9,087.8	M2	REINFORCED CONCRETE DECK SLAB
2	EA	***X***X***MM PERFORATED CS PIPE TEE RISER, 1.63MM THICK (450MM X 450MM X 450MM)	7,717.6	M2	GROOVING BRIDGE FLOORS
1	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (800MM X 800MM X 800MM)	1,451.9	M3	CLASS A CONCRETE (BRIDGE)
2	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (900MM X 900MM X 900MM)	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (181+85.000 -L-)
150	M3	STILLING BASINS	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (190+89.000 -L-LT)
168	HA	SEEDING & MULCHING			
98	HA	MOWING			
2,125	KG	SEED FOR REPAIR SEEDING	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (190+89.000 -L-RT)
7	MTN	FERTILIZER FOR REPAIR SEEDING			
4,725	KG	SEED FOR SUPPLEMENTAL SEEDING	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (238+35.000 -L-)
282.5	MTN	FERTILIZER TOPDRESSING			
0.57	HA	SPECIALIZED SEEDING UNDER GUIDERAIL & GUARDRAIL (CENTIPEDE)	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (245+73.259 -L-)
20	M	IMPERVIOUS DIKE	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (199+75.000 -L-)
30	HR	SPECIALIZED HAND MOWING			
56	EA	RESPONSE FOR EROSION CONTROL	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (276+55.853 -L-)
125	M3	CULVERT DIVERSION CHANNEL			
11	HA	REFORESTATION	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (276+55.853 -L-)
0.25	HA	STREAMBANK REFORESTATION			
61	EA	GENERIC EROSION CONTROL ITEM ROOTWADS	Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (276+55.853 -L-)
1,300	M2	GENERIC EROSION CONTROL ITEM COIR FIBER MAT			
120	M	SIGNAL CABLE	139,446	KG	REINFORCING STEEL (BRIDGE)
3	EA	VEHICLE SIGNAL HEAD (300MM, 3 SECTION)	13,550	KG	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)
3	EA	VEHICLE SIGNAL HEAD (300MM, 5 SECTION)	1,311.25	M	1372MM PRESTRESSED CONCRETE GIRDERS
122	M	MESSSENGER CABLE (9.52MM)			
55	M	TRENCHING (UNPAVED)	747,800	LS	APPROX ..... KG STRUCTURAL STEEL
3	EA	JUNCTION BOX (STANDARD SIZE)			
4	EA	WOOD POLE	8,444	M	HP310X79 STEEL PILES
6	EA	GUY ASSEMBLY	Lump Sum	LS	GALVANIZING STEEL PILES AT STA ***** (190+89.000 -L-LT)
1	EA	25MM RISER WITH WEATHERHEAD			
4	EA	50MM RISER WITH WEATHERHEAD	Lump Sum	LS	GALVANIZING STEEL PILES AT STA ***** (190+89.000 -L-RT)
188	M	INDUCTIVE LOOP SAWCUT			
268	M	LEAD-IN CABLE			
1	EA	CONTROLLER WITH CABINET (TYPE 2070L, POLE MOUNTED)	1,264.666	M	CONCRETE BARRIER RAIL
			1,981	M2	100MM SLOPE PROTECTION

## CULVERT ITEMS

## STRUCTURE ITEMS



4,245	MTN	PLAIN RIP RAP CLASS B
3,216	M2	FILTER FABRIC FOR DRAINAGE
Lump Sum	LS	POT BEARINGS
Lump Sum	LS	ELASTOMERIC BEARINGS
Lump Sum	LS	EVAZOTE JOINT SEALS

## STATE FUNDED PROPOSAL, CONTRACTOR LICENSE REQUIRED TO BID

L030722 007

CONTRACT ID : C200738 34398.3.8

DIV OFFICE ABERDEEN

LENGTH = 5.945 KM

COUNTY : RICHMOND

GRADING, DRAINAGE, PAVING &amp; STRUCTURES.

MBE GOAL 10.0% WBE 5.0% COMPLETION DATE : DEC 31 2006

US-220 BYPASS FROM SOUTH OF SR-1448 TO NORTH OF SR-1452.

ROADWAY ITEMS					
			33.6	M	450MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK
			24	M	600MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK
Lump Sum	LS	MOBILIZATION	31	EA	***MM BIT COAT CS PIPE ELBOWS, TYPE B ***MM THICK (300MM, 1.63MM)
Lump Sum	LS	CONSTRUCTION SURVEYING	3	EA	400MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK
Lump Sum	LS	CLEARING & GRUBBING ... HEC-TARE(S)	2	EA	600MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK
2	HA	SUPPLEMENTARY CLEARING & GRUBBING	313.7	M	PIPE REMOVAL
2	EA	SEALING ABANDONED WELLS	156	M2	150MM SLOPE PROTECTION
939,400	M3	UNCLASSIFIED EXCAVATION	Lump Sum	LS	FINE GRADING
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (16+98.476 -Y8-)	500	KG	SEALING EXISTING PAVEMENT CRACKS
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (20+66.960 -Y1-)	32,560	M2	LIME TREATED SOIL (SLURRY METHOD)
39,000	M3	UNDERCUT EXCAVATION	360	MTN	LIME FOR LIME TREATED SOIL
4,000	MTN	CLASS IV SUBGRADE STABILIZATION	94,500	MTN	AGGREGATE BASE COURSE
318,800	M3	BORROW EXCAVATION	75,970	M2	***MM SOIL CEMENT BASE (180MM)
19,500	M3	DRAINAGE DITCH EXCAVATION	2,280	MTN	PORTLAND CEMENT FOR SOIL CEMENT BASE
1,150	M	BERM DITCH CONSTRUCTION	73,800	L	ASPHALT CURING SEAL
32,700	M2	REMOVAL OF EXISTING ASPHALT PAVEMENT	250	MTN	INCIDENTAL STONE BASE
35	HR	PROOF ROLLING	26,100	L	PRIME COAT
34,800	M3	SELECT GRANULAR MATERIAL	19,600	M2	MILLING ASPHALT PAVEMENT, **MM DEPTH (55MM)
26,340	M2	FABRIC FOR SOIL STABILIZATION	1,960	M2	INCIDENTAL MILLING
1,070	MTN	SELECT MATERIAL, CLASS II	7,710	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0B
1,395	MTN	FOUNDATION CONDITIONING MATERIAL, MINOR STRS	10,700	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B
73.2	M	375MM SIDE DRAIN PIPE	25,890	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C
51.6	M	300MM RC PIPE CULVERTS, CLASS III	8,570	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5B
763.2	M	375MM RC PIPE CULVERTS, CLASS III	21,580	MTN	ASPHALT CONC SURFACE COURSE, TYPE S12.5C
608.4	M	450MM RC PIPE CULVERTS, CLASS III	2,609	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22
598.8	M	600MM RC PIPE CULVERTS, CLASS III	1,187	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 70-22
658.8	M	750MM RC PIPE CULVERTS, CLASS III	300	MTN	ASPHALT PLANT MIX PAVEMENT REPAIR
139.2	M	900MM RC PIPE CULVERTS, CLASS III	23,850	M	MILLED RUMBLE STRIPS
242.4	M	1200MM RC PIPE CULVERTS, CLASS III	190	EA	RIGHT OF WAY MARKERS
73.2	M	1350MM RC PIPE CULVERTS, CLASS III	1,990	M3	SUBDRAIN EXCAVATION
202.8	M	****MM RC PIPE CULVERTS, CLASS IV (1200MM)	995	M3	SUBDRAIN FINE AGGREGATE
57.6	M	****MM RC PIPE CULVERTS, CLASS IV (450MM)	2,400	M	150MM PERFORATED SUBDRAIN PIPE
106.8	M	****MM RC PIPE CULVERTS, CLASS IV (600MM)	240	EA	150MM SUBDRAIN PIPE WYES, TEES, & ELBOWS
129.6	M	****MM RC PIPE CULVERTS, CLASS IV (750MM)	16	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET
169.2	M	****MM RC PIPE CULVERTS, CLASS IV (900MM)	32	M	150MM OUTLET PIPE (SUBDRAINS)
48	M	400MM CS PIPE CULVERTS, 1.63MM THICK	10	MTN	BLOTTING SAND
19.2	M	450MM CS PIPE CULVERTS, 1.63MM THICK	26.1	M3	ENDWALLS
12	M	800MM CS PIPE CULVERTS, 2.01MM THICK	3.8	M3	REINFORCED ENDWALLS
243.6	M	300MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	3.68	M3	PIPE COLLARS
163.2	M	400MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	0.4	M3	PIPE PLUGS
			72	EA	MASONRY DRAINAGE STRUCTURES
			7.4	M	MASONRY DRAINAGE STRUCTURES
			13	EA	FRAME WITH TWO GRATES, STD 840.**** (840.20)
			57	EA	FRAME WITH TWO GRATES, STD 840.22
			5	EA	FRAME WITH TWO GRATES, STD 840.24
			2	EA	FRAME WITH TWO GRATES, STD 840.29

			2	EA	GUIDE SIGN RELOCATION - TEMP (GROUND TO GROUND MOUNTED SIGNS)
1,250	M	SHOULDER BERM GUTTER	1,250	EA	TEMPORARY RAISED PAVEMENT MARKERS
2	EA	MODIFIED CONCRETE FLUME	35,500	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 2.3MM)
110	M2	100MM CONCRETE PAVED DITCH	13,400	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 3.1MM)
560	M2	125MM MONOLITHIC CONCRETE IS- LANDS (KEYED IN)	1,000	M	THERMOPLASTIC PAVEMENT MARKING LINES (200MM, 2.3MM)
45.6	M	PRECAST REINFORCED CONCRETE BARRIER, SINGLE FACED	20	M	THERMOPLASTIC PAVEMENT MARKING LINES (600MM, 3.1MM)
5	EA	CONVERT EXISTING CATCH BASIN TO DROP INLET	75	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (2.3MM)
4,751.07	M	STEEL BM GUARDRAIL	94,250	M	PAINT PAVEMENT MARKING LINES (100MM)
167.64	M	STEEL BM GUARDRAIL, SHOP CURVED	450	M	PAINT PAVEMENT MARKING LINES (200MM)
10	EA	ADDITIONAL GUARDRAIL POSTS	300	M	PAINT PAVEMENT MARKING LINES (600MM)
2	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (B-77)	130	EA	PAINT PAVEMENT MARKING SYMBOL
3	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (BIC)	150	M	REMOVAL OF PAVEMENT MARKING LINES (100MM)
4	EA	GUARDRAIL ANCHOR UNITS, TYPE AT-1	20	M	REMOVAL OF PAVEMENT MARKING LINES (200MM)
20	EA	GUARDRAIL ANCHOR UNITS, TYPE CAT-1	20	M	REMOVAL OF PAVEMENT MARKING LINES (600MM)
12	EA	GUARDRAIL ANCHOR UNITS, TYPE III	600	M	CURING COMPOUND REMOVAL, LINES
35	EA	GUARDRAIL ANCHOR UNITS, TYPE 350	1,600	EA	PERMANENT RAISED PAVEMENT MARKERS
500	M	REMOVE EXISTING GUARDRAIL	6	EA	2.1M U-CHANNEL POSTS
110.49	M	TEMPORARY STEEL BM GUARDRAIL	80	EA	FLEXIBLE DELINEATORS (CRYSTAL)
2	EA	GUARDRAIL ANCHOR UNITS, TYPE 350 TEMPORARY	30	EA	FLEXIBLE DELINEATORS (YELLOW)
5,415	M	DOUBLE FACED CABLE GUIDERAIL	40	EA	FLEXIBLE DELINEATORS (CRYSTAL & RED)
28	EA	CABLE GUIDERAIL ANCHOR UNITS	15	EA	FLEXIBLE DELINEATORS (YELLOW & RED)
11,500	M	WOVEN WIRE FENCE, 1200MM FAB- RIC	6	EA	OBJECT MARKERS (END OF ROAD)
2,500	EA	100MM TIMBER FENCE POSTS, 2.30M LONG	77	MTN	FOUNDATION CONDITIONING MATE- RIAL, UTILITIES CLASS ***** (IV)
440	EA	125MM TIMBER FENCE POSTS, 2.50M LONG	77	MTN	BEDDING MATERIAL, UTILITIES CLASS ***** (IV)
100	M	ADDITIONAL BARBED WIRE	22	MTN	PAVEMENT REPAIR FOR UTILITY WORK
300	MTN	PLAIN RIP RAP, CLASS I	8	M	20MM COPPER WATER PIPE, TYPE K
2,100	MTN	PLAIN RIP RAP, CLASS B	271	M	150MM PVC WATER PIPE, SDR 21, 1.38MPA WP
7,500	M2	FILTER FABRIC FOR DRAINAGE	1,106	M	300MM PVC WATER PIPE, SDR 21, 1.38MPA WP
4	EA	PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON	1,203	KG	DUCTILE IRON WATER PIPE FIT- TINGS, 1.72MPA MIN WP
9	M3	REINFORCED CONCRETE SIGN FOOT- INGS	1	EA	20MM CORPORATION STOP
2	M3	PLAIN CONCRETE SIGN FOOTINGS	5	EA	150MM GATE VALVE & VALVE BOX, 1.38MPA WP
3,087	KG	SUPPORTS, BREAKAWAY STEEL BEAM	7	EA	300MM GATE VALVE & VALVE BOX, ***MPA WP (1.38MPA)
1,291	KG	SUPPORTS, SIMPLE STEEL BEAM	2	EA	300MM TRANSITION COUPLING, ***** (PVC TO AC)
910	M	SUPPORTS, 4.5KG STEEL U-CHANNEL	1	EA	RELOCATE EXISTING WATER METER
8	EA	SUPPORTS, 3KG STEEL U-CHANNEL	1	EA	RELOCATE EXISTING FIRE HYDRANT
16	EA	SIGN ERECTION, TYPE D	974	M	FILL OR REMOVE ABANDONED 300MM PIPE, ***** (AC WATER)
89	EA	SIGN ERECTION, TYPE E	76	M	450MM STEEL ENCASEMENT PIPE, ***MM THICK, BY BORING & JACKING (8MM)
24	EA	SIGN ERECTION, TYPE F	110	M	600MM STEEL ENCASEMENT PIPE, ***MM THICK, BY BORING & JACKING (8MM)
15	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (A)	41	EA	GENERIC UTILITY ITEM 300MM RESTRAINED RETAINER GLAND, 1.72MPA WP
11	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (B)	2,500	M	TEMPORARY SILT FENCE
8	EA	SIGN ERECTION, MILEMARKERS	700	MTN	STONE FOR EROSION CONTROL, CLASS A
69	EA	DISPOSAL OF SIGN SYSTEM, U- CHANNEL	11,125	MTN	STONE FOR EROSION CONTROL, CLASS B
1	EA	DISPOSAL OF SIGN SYSTEM, WOOD	4,000	MTN	SEDIMENT CONTROL STONE
131	M2	WORK ZONE SIGNS (STATIONARY)	88.5	HA	TEMPORARY MULCHING
30	M2	WORK ZONE SIGNS (PORTABLE)	3,675	KG	SEED FOR TEMPORARY SEEDING
25	M2	WORK ZONE SIGNS (BARRICADE MOUNTED)			
3	EA	FLASHING ARROW PANELS, TYPE C			
3	EA	CHANGEABLE MESSAGE SIGNS			
8	EA	WARNING FLAG SETS			
400	EA	DRUMS			
150	EA	CONES			
110	M	BARRICADES (TYPE III)			
2,500	HR	FLAGGER			
12	EA	WARNING LIGHTS (TYPE B)			
2	EA	TRUCK MOUNTED IMPACT ATTENUA- TOR (45 MPH)			
2	EA	TRUCK MOUNTED IMPACT ATTENUA- TOR (60 MPH)			
200	EA	TUBULAR MARKERS (FIXED)			

29.5	MTN	FERTILIZER FOR TEMPORARY SEED- ING
1,055	M	TEMPORARY SLOPE DRAINS
62	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS
58,500	M3	SILT EXCAVATION
6,000	M2	SYNTHETIC ROVING
3,200	M2	MATTING FOR EROSION CONTROL
250	M	6.4MM HARDWARE CLOTH
1	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (800MM X 800MM X 800MM)
100	M3	STILLING BASINS
87.5	HA	SEEDING & MULCHING
50	HA	MOWING
1,075	KG	SEED FOR REPAIR SEEDING
3.5	MTN	FERTILIZER FOR REPAIR SEEDING
2,450	KG	SEED FOR SUPPLEMENTAL SEEDING
147.25	MTN	FERTILIZER TOPDRESSING
1.3	HA	SPECIALIZED SEEDING UNDER GUIDERAIL & GUARDRAIL (CENTI- PEDE)
35	M	IMPERVIOUS DIKE
25	HR	SPECIALIZED HAND MOWING
24	EA	RESPONSE FOR EROSION CONTROL
715	M3	CULVERT DIVERSION CHANNEL
6	HA	REFORESTATION
135	M	SIGNAL CABLE
5	EA	VEHICLE SIGNAL HEAD (300MM, 3 SECTION)
1	EA	VEHICLE SIGNAL HEAD (300MM, 5 SECTION)
135	M	MESSENGER CABLE (9.52MM)
130	M	TRENCHING (UNPAVED)
4	EA	WOOD POLE
8	EA	GUY ASSEMBLY
1	EA	25MM RISER WITH WEATHERHEAD
3	EA	50MM RISER WITH WEATHERHEAD
100	M	INDUCTIVE LOOP SAWCUT
305	M	LEAD-IN CABLE
1	EA	MICROWAVE VEHICLE DETECTOR
85	M	TYPE 2 LEAD-IN CABLE
6	EA	SIGN FOR SIGNALS
1	EA	CONTROLLER WITH CABINET (TYPE 2070L, POLE MOUNTED)
3	EA	DETECTOR CHANNEL (TYPE 2070L)

### CULVERT ITEMS

Lump Sum	LS	CULVERT EXCAVATION, STA ***** (57+00.000-L-)
327	MTN	FOUNDATION CONDITIONING MATER- IAL, BOX CULVERT
458.6	M3	CLASS A CONCRETE (CULVERT)
35,479	KG	REINFORCING STEEL (CULVERT)

### STRUCTURE ITEMS

Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,19+16.856-L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,41+34.347-L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,62+16.062-L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (2,19+16.856-L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (3,19+16.856-L-)
2,857.9	M2	REINFORCED CONCRETE DECK SLAB
2,481.5	M2	GROOVING BRIDGE FLOORS
439	M3	CLASS A CONCRETE (BRIDGE)

Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (19+16.856-L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (41+34.347-L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (62+16.062-L-)
39,656	KG	REINFORCING STEEL (BRIDGE)
4,019	KG	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)
1,249.394	M	1372MM PRESTRESSED CONCRETE GIRDERS
1,737.5	M	HP310X79 STEEL PILES
52	EA	STEEL PILE POINTS
401.244	M	CONCRETE BARRIER RAIL
1,960	M2	100MM SLOPE PROTECTION
Lump Sum	LS	ELASTOMERIC BEARINGS
Lump Sum	LS	EVAZOTE JOINT SEALS

## STATE FUNDED PROPOSAL, CONTRACTOR LICENSE REQUIRED TO BID

L030722 008

CONTRACT ID : C200280 34398.3.9

DIV OFFICE ABERDEEN

LENGTH = 10.382 KM

COUNTY : RICHMOND

GRADING, DRAINAGE, PAVING &amp; STRUCTURES.

MBE GOAL 10.0% WBE 5.0% COMPLETION DATE : DEC 31 2006

US-220 BYPASS FROM SOUTH OF SR-1455 TO NORTH OF NC-73.

ROADWAY ITEMS						
			50.4	M	600MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	
			31	EA	***MM BIT COAT CS PIPE ELBOWS, TYPE B ***MM THICK (300MM, 1.63MM)	
Lump Sum	LS	MOBILIZATION				
Lump Sum	LS	CONSTRUCTION SURVEYING				
Lump Sum	LS	CLEARING & GRUBBING ... HEC-TARE(S)	2	EA	450MM BIT COAT CS PIPE ELBOWS, TYPE B 1.63MM THICK	
2	HA	SUPPLEMENTARY CLEARING & GRUBBING	109.5	M	PIPE REMOVAL	
			210	M2	150MM SLOPE PROTECTION	
1,291,000	M3	UNCLASSIFIED EXCAVATION	Lump Sum	LS	FINE GRADING	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (15+83.426-Y6-)	194,000	MTN	AGGREGATE BASE COURSE	
			250	MTN	INCIDENTAL STONE BASE	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (19+32.697-Y1REV-)	214,000	L	PRIME COAT	
			60	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0B	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (70+85.310-L-)	42,600	MTN	ASPHALT CONC BASE COURSE, TYPE B25.0C	
			16,100	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	
Lump Sum	LS	REINFORCED BRIDGE APPROACH FILL, STATION ***** (70+98.448-L-)	42,000	MTN	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	
18,000	M3	UNDERCUT EXCAVATION	14,100	MTN	ASPHALT CONC SURFACE COURSE, TYPE S9.5A	
2,700	MTN	CLASS IV SUBGRADE STABILIZATION	42,300	MTN	ASPHALT CONC SURFACE COURSE, TYPE S12.5C	
64,000	M3	BORROW EXCAVATION	5,482	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22	
6,900	M3	DRAINAGE DITCH EXCAVATION	2,327	MTN	ASPHALT BINDER FOR PLANT MIX, GRADE PG 70-22	
1,330	M	BERM DITCH CONSTRUCTION	250	MTN	ASPHALT PLANT MIX PAVEMENT REPAIR	
22,700	M2	REMOVAL OF EXISTING ASPHALT PAVEMENT	41,400	M	MILLED RUMBLE STRIPS	
1,750	M2	BREAKING OF EXISTING ASPHALT PAVEMENT	256	EA	RIGHT OF WAY MARKERS	
43	HR	PROOF ROLLING	5,150	M3	SUBDRAIN EXCAVATION	
14,520	M3	SELECT GRANULAR MATERIAL	2,580	M3	SUBDRAIN FINE AGGREGATE	
10,520	M2	FABRIC FOR SOIL STABILIZATION	6,210	M	150MM PERFORATED SUBDRAIN PIPE	
3,100	MTN	FOUNDATION CONDITIONING MATERIAL, MINOR STRS	621	EA	150MM SUBDRAIN PIPE WYES, TEES, & ELBOWS	
34.8	M	375MM SIDE DRAIN PIPE	42	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET	
174	M	450MM SIDE DRAIN PIPE	84	M	150MM OUTLET PIPE (SUBDRAINS)	
43.2	M	300MM RC PIPE CULVERTS, CLASS III	32.8	M3	ENDWALLS	
1,716	M	375MM RC PIPE CULVERTS, CLASS III	3.8	M3	REINFORCED ENDWALLS	
1,209.6	M	450MM RC PIPE CULVERTS, CLASS III	170	EA	MASONRY DRAINAGE STRUCTURES	
2,920.8	M	600MM RC PIPE CULVERTS, CLASS III	45.03	M	MASONRY DRAINAGE STRUCTURES	
1,528.8	M	750MM RC PIPE CULVERTS, CLASS III	26	EA	FRAME WITH TWO GRATES, STD 840.***** (840.20)	
1,432.2	M	900MM RC PIPE CULVERTS, CLASS III	137	EA	FRAME WITH TWO GRATES, STD 840.22	
192	M	1050MM RC PIPE CULVERTS, CLASS III	1	EA	FRAME WITH TWO GRATES, STD 840.24	
272.4	M	1200MM RC PIPE CULVERTS, CLASS III	2	EA	FRAME WITH TWO GRATES, STD 840.29	
123.6	M	****MM RC PIPE CULVERTS, CLASS IV (1200MM)	4	EA	FRAME WITH COVER, STD 840.54	
154.8	M	****MM RC PIPE CULVERTS, CLASS IV (1350MM)	3,000	M	SHOULDER BERM GUTTER	
37.2	M	***MM CS PIPE CULVERTS, ****MM THICK (900MM, 2.01MM)	4	EA	MODIFIED CONCRETE FLUME	
32.4	M	600MM CS PIPE CULVERTS, 1.63MM THICK	50	M2	100MM CONCRETE PAVED DITCH	
18	M	800MM CS PIPE CULVERTS, 2.01MM THICK	72.8	M	PRECAST REINFORCED CONCRETE BARRIER, SINGLE FACED	
309.6	M	300MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	5,292.09	M	STEEL BM GUARDRAIL	
12	M	400MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	34.29	M	STEEL BM GUARDRAIL, SHOP CURVED	
36	M	450MM BIT COAT CS PIPE CULVERTS, TYPE B 1.63MM THICK	10	EA	ADDITIONAL GUARDRAIL POSTS	
			8	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (B-77)	
			1	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (BIC)	
			1	EA	GUARDRAIL ANCHOR UNITS, TYPE AT-1	

			860	M	PAINT PAVEMENT MARKING LINES (200MM)
			190	M	PAINT PAVEMENT MARKING LINES (600MM)
14	EA	GUARDRAIL ANCHOR UNITS, TYPE CAT-1	62	EA	PAINT PAVEMENT MARKING SYMBOL
10	EA	GUARDRAIL ANCHOR UNITS, TYPE III	450	M	REMOVAL OF PAVEMENT MARKING LINES (100MM)
34	EA	GUARDRAIL ANCHOR UNITS, TYPE 350	30	M	REMOVAL OF PAVEMENT MARKING LINES (600MM)
2	EA	GUARDRAIL ANCHOR UNITS, TYPE M-350	2	EA	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS
10,339.7	M	DOUBLE FACED CABLE GUIDERAIL	3,030	EA	PERMANENT RAISED PAVEMENT MARKERS
38	EA	CABLE GUIDERAIL ANCHOR UNITS	28	EA	2.1M U-CHANNEL POSTS
22,900	M	WOVEN WIRE FENCE, 1200MM FABRIC	106	EA	FLEXIBLE DELINEATORS (CRYSTAL)
5,000	EA	100MM TIMBER FENCE POSTS, 2.30M LONG	25	EA	FLEXIBLE DELINEATORS (YELLOW)
900	EA	125MM TIMBER FENCE POSTS, 2.50M LONG	15	EA	FLEXIBLE DELINEATORS (CRYSTAL & RED)
100	M	CHAIN LINK FENCE, 1200MM FABRIC	15	EA	FLEXIBLE DELINEATORS (YELLOW & RED)
30	EA	METAL LINE POSTS FOR 1200MM CHAIN LINK FENCE	28	EA	OBJECT MARKERS (TYPE **)
3	EA	METAL TERMINAL POSTS FOR 1200MM CHAIN LINK FENCE	(3)		
22,900	M	ADDITIONAL BARBED WIRE	640	MTN	FOUNDATION CONDITIONING MATERIAL, UTILITIES CLASS ***** (IV)
1	EA	DOUBLE GATES, *****MM HIGH, *****MM WIDE, *****MM OPENING (1200MM, 4000MM, 8000MM)	640	MTN	BEDDING MATERIAL, UTILITIES CLASS ***** (IV)
1,400	MTN	PLAIN RIP RAP, CLASS I	100	MTN	PAVEMENT REPAIR FOR UTILITY WORK
400	MTN	PLAIN RIP RAP, CLASS A	201.6	M	*****MM DI WATER PIPE, CLASS ***** WP
1,800	MTN	PLAIN RIP RAP, CLASS B	(100MM, CL 50, 2.41MPA WP)		
10,400	M2	FILTER FABRIC FOR DRAINAGE	1,301.3	M	*****MM DI WATER PIPE, CLASS ***** WP
7	EA	PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON	(250MM, CL 50, 2.41MPA WP)		
85	EA	GENERIC EROSION CONTROL ITEM LOG VANES	137.4	M	20MM COPPER WATER PIPE, TYPE K
19	M3	REINFORCED CONCRETE SIGN FOOTINGS	709.5	M	150MM PVC WATER PIPE, SDR 21, 1.38MPA WP
2	M3	PLAIN CONCRETE SIGN FOOTINGS	41.7	M	200MM PVC WATER PIPE, SDR 21, 1.38MPA WP
5,269	KG	SUPPORTS, BREAKAWAY STEEL BEAM	1,745.3	M	250MM PVC WATER PIPE, SDR 21, 1.38MPA WP
4,243	KG	SUPPORTS, SIMPLE STEEL BEAM	2,246.8	KG	DUCTILE IRON WATER PIPE FITTINGS, 1.72MPA MIN WP
791	M	SUPPORTS, 4.5KG STEEL U-CHANNEL	1	EA	20MM CORPORATION STOP
12	EA	SUPPORTS, 3KG STEEL U-CHANNEL	2	EA	*****MM GATE VALVE & VALVE BOX, *****MPA WP
14	EA	SIGN ERECTION, TYPE D	(100MM, 1.38MPA WP)		
67	EA	SIGN ERECTION, TYPE E	10	EA	150MM GATE VALVE & VALVE BOX, 1.38MPA WP
24	EA	SIGN ERECTION, TYPE F	1	EA	200MM GATE VALVE & VALVE BOX, *****MPA WP
26	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (A)	(1.38MPA WP)		
17	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (B)	15	EA	250MM GATE VALVE & VALVE BOX, *****MPA WP
12	EA	SIGN ERECTION, MILEMARKERS	(1.38MPA WP)		
27	M2	WORK ZONE SIGNS (STATIONARY)	1	EA	*** X *****MM TAPPING SADDLE (250MM X 20MM)
67	M2	WORK ZONE SIGNS (PORTABLE)	1	EA	RELOCATE EXISTING WATER METER
25	M2	WORK ZONE SIGNS (BARRICADE MOUNTED)	5	EA	RELOCATE EXISTING FIRE HYDRANT
1	EA	FLASHING ARROW PANELS, TYPE C	3,000	M	TEMPORARY SILT FENCE
1	EA	CHANGEABLE MESSAGE SIGNS	1,050	MTN	STONE FOR EROSION CONTROL, CLASS A
8	EA	WARNING FLAG SETS	21,100	MTN	STONE FOR EROSION CONTROL, CLASS B
75	EA	DRUMS	8,300	MTN	SEDIMENT CONTROL STONE
100	EA	CONES	161	HA	TEMPORARY MULCHING
260	M	BARRICADES (TYPE III)	6,175	KG	SEED FOR TEMPORARY SEEDING
960	HR	FLAGGER	49.75	MTN	FERTILIZER FOR TEMPORARY SEEDING
1	EA	WARNING LIGHTS (TYPE B)	1,550	M	TEMPORARY SLOPE DRAINS
1,110	EA	TEMPORARY RAISED PAVEMENT MARKERS	140	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS
39,360	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 2.3MM)	150,000	M3	SILT EXCAVATION
16,770	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 3.1MM)	10,000	M2	SYNTHETIC ROVING
1,190	M	THERMOPLASTIC PAVEMENT MARKING LINES (200MM, 2.3MM)	10,000	M2	MATting FOR EROSION CONTROL
110	M	THERMOPLASTIC PAVEMENT MARKING LINES (600MM, 3.1MM)	7,150	M2	PERMANENT SOIL REINFORCEMENT MAT
71	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (2.3MM)	100	M	6.4MM HARDWARE CLOTH
1,140	M	COLD APPLIED PLASTIC PAVEMENT MARKING LINES (100MM)	2	EA	***X***X*****MM PERFORATED CS PIPE TEE RISER, 1.63MM THICK (600MM X 600MM X 600MM)
5	EA	COLD APPLIED PLASTIC PAVEMENT MARKING SYMBOL	1	EA	***X ***X*****MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (800MM X 800MM X 800MM)
139,060	M	PAINT PAVEMENT MARKING LINES (100MM)			

1	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (900MM X 900MM X 900MM)	Lump Sum	LS	EVAZOTE JOINT SEALS
300	M3	STILLING BASINS			
147	HA	SEEDING & MULCHING			
91.5	HA	MOWING			
1,975	KG	SEED FOR REPAIR SEEDING			
6.5	MTN	FERTILIZER FOR REPAIR SEEDING			
4,125	KG	SEED FOR SUPPLEMENTAL SEEDING			
247.25	MTN	FERTILIZER TOPDRESSING			
1.81	HA	SPECIALIZED SEEDING UNDER GUIDERAIL & GUARDRAIL (CENTI- PEDE)			
50	M	IMPERVIOUS DIKE			
100	HR	SPECIALIZED HAND MOWING			
32	EA	RESPONSE FOR EROSION CONTROL			
620	M3	CULVERT DIVERSION CHANNEL			
5	HA	REFORESTATION			
0.52	HA	STREAMBANK REFORESTATION			
40	EA	GENERIC EROSION CONTROL ITEM ROOT WADS			

### CULVERT ITEMS

Lump Sum	LS	CULVERT EXCAVATION, STA ***** (68+33.000-L-)
555	MTN	FOUNDATION CONDITIONING MATER- IAL, BOX CULVERT
1,138.4	M3	CLASS A CONCRETE (CULVERT)
86,905	KG	REINFORCING STEEL (CULVERT)

### STRUCTURE ITEMS

Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 152+01.036-L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 70+91.154-L- LT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 70+91.154-L-RT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 99+31.540-L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (2, 70+91.154-L- RT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (2, 70+91.154-L-LT)
3,248.2	M2	REINFORCED CONCRETE DECK SLAB
2,914.9	M2	GROOVING BRIDGE FLOORS
546.6	M3	CLASS A CONCRETE (BRIDGE)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** ( 152+01.036-L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** ( 70+91.154-L- LT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** ( 70+91.154-L- RT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (99+31.540-L-)
47,964	KG	REINFORCING STEEL (BRIDGE)
3,617	KG	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)
340.1	M	914MM PRESTRESSED CONCRETE GIRDERS
274,400	LS	APPROX ..... KG STRUCTURAL STEEL
1,741	M	HP310X79 STEEL PILES
413.292	M	CONCRETE BARRIER RAIL
2,569.7	M2	100MM SLOPE PROTECTION
Lump Sum	LS	ELASTOMERIC BEARINGS

[illegible]



			17,900	M2	FILTER FABRIC FOR DRAINAGE
			11	EA	PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON
			85	EA	GENERIC EROSION CONTROL ITEM LOG VANES
			28	M3	REINFORCED CONCRETE SIGN FOOTINGS
			4	M3	PLAIN CONCRETE SIGN FOOTINGS
			8,356	KG	SUPPORTS, BREAKAWAY STEEL BEAM
			5,534	KG	SUPPORTS, SIMPLE STEEL BEAM
			1,701	M	SUPPORTS, 4.5KG STEEL U-CHANNEL
			20	EA	SUPPORTS, 3KG STEEL U-CHANNEL
			30	EA	SIGN ERECTION, TYPE D
			156	EA	SIGN ERECTION, TYPE E
			48	EA	SIGN ERECTION, TYPE F
			41	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (A)
			28	EA	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (B)
			20	EA	SIGN ERECTION, MILEMARKERS
			69	EA	DISPOSAL OF SIGN SYSTEM, U-CHANNEL
			1	EA	DISPOSAL OF SIGN SYSTEM, WOOD
			158	M2	WORK ZONE SIGNS (STATIONARY)
			97	M2	WORK ZONE SIGNS (PORTABLE)
			50	M2	WORK ZONE SIGNS (BARRICADE MOUNTED)
			4	EA	FLASHING ARROW PANELS, TYPE C
			4	EA	CHANGEABLE MESSAGE SIGNS
			16	EA	WARNING FLAG SETS
			475	EA	DRUMS
			250	EA	CONES
			370	M	BARRICADES (TYPE III)
			3,460	HR	FLAGGER
			13	EA	WARNING LIGHTS (TYPE B)
			2	EA	TRUCK MOUNTED IMPACT ATTENUATOR (45 MPH)
			2	EA	TRUCK MOUNTED IMPACT ATTENUATOR (60 MPH)
			200	EA	TUBULAR MARKERS (FIXED)
			2	EA	GUIDE SIGN RELOCATION - TEMP (GROUND TO GROUND MOUNTED SIGNS)
			2,360	EA	TEMPORARY RAISED PAVEMENT MARKERS
			74,860	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 2.3MM)
			30,170	M	THERMOPLASTIC PAVEMENT MARKING LINES (100MM, 3.1MM)
			2,190	M	THERMOPLASTIC PAVEMENT MARKING LINES (200MM, 2.3MM)
			130	M	THERMOPLASTIC PAVEMENT MARKING LINES (600MM, 3.1MM)
			146	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (2.3MM)
			1,140	M	COLD APPLIED PLASTIC PAVEMENT MARKING LINES (100MM)
			5	EA	COLD APPLIED PLASTIC PAVEMENT MARKING SYMBOL
			233,310	M	PAINT PAVEMENT MARKING LINES (100MM)
			1,310	M	PAINT PAVEMENT MARKING LINES (200MM)
			490	M	PAINT PAVEMENT MARKING LINES (600MM)
			192	EA	PAINT PAVEMENT MARKING SYMBOL
			600	M	REMOVAL OF PAVEMENT MARKING LINES (100MM)
			20	M	REMOVAL OF PAVEMENT MARKING LINES (200MM)
			50	M	REMOVAL OF PAVEMENT MARKING LINES (600MM)
			2	EA	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS
			600	M	CURING COMPOUND REMOVAL, LINES
			4,630	EA	PERMANENT RAISED PAVEMENT MARKERS
			34	EA	2.1M U-CHANNEL POSTS
			186	EA	FLEXIBLE DELINEATORS (CRYSTAL)
			55	EA	FLEXIBLE DELINEATORS (YELLOW)
			55	EA	FLEXIBLE DELINEATORS (CRYSTAL & RED)
550	MTN	ASPHALT PLANT MIX PAVEMENT REPAIR			
65,250	M	MILLED RUMBLE STRIPS			
446	EA	RIGHT OF WAY MARKERS			
7,140	M3	SUBDRAIN EXCAVATION			
3,575	M3	SUBDRAIN FINE AGGREGATE			
8,610	M	150MM PERFORATED SUBDRAIN PIPE			
861	EA	150MM SUBDRAIN PIPE WYES, TEES, & ELBOWS			
58	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET			
116	M	150MM OUTLET PIPE (SUBDRAINS)			
10	MTN	BLOTTING SAND			
58.9	M3	ENDWALLS			
7.6	M3	REINFORCED ENDWALLS			
3.68	M3	PIPE COLLARS			
0.4	M3	PIPE PLUGS			
242	EA	MASONRY DRAINAGE STRUCTURES			
52.43	M	MASONRY DRAINAGE STRUCTURES			
39	EA	FRAME WITH TWO GRATES, STD 840.***** (840.20)			
194	EA	FRAME WITH TWO GRATES, STD 840.22			
6	EA	FRAME WITH TWO GRATES, STD 840.24			
4	EA	FRAME WITH TWO GRATES, STD 840.29			
4	EA	FRAME WITH COVER, STD 840.54			
4,250	M	SHOULDER BERM GUTTER			
6	EA	MODIFIED CONCRETE FLUME			
160	M2	100MM CONCRETE PAVED DITCH			
560	M2	125MM MONOLITHIC CONCRETE ISLANDS (KEYED IN)			
118.4	M	PRECAST REINFORCED CONCRETE BARRIER, SINGLE FACED			
5	EA	CONVERT EXISTING CATCH BASIN TO DROP INLET			
10,043.16	M	STEEL BM GUARDRAIL			
201.93	M	STEEL BM GUARDRAIL, SHOP CURVED			
20	EA	ADDITIONAL GUARDRAIL POSTS			
10	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (B-77)			
4	EA	GUARDRAIL ANCHOR UNITS, TYPE ***** (BIC)			
5	EA	GUARDRAIL ANCHOR UNITS, TYPE AT-1			
34	EA	GUARDRAIL ANCHOR UNITS, TYPE CAT-1			
22	EA	GUARDRAIL ANCHOR UNITS, TYPE III			
69	EA	GUARDRAIL ANCHOR UNITS, TYPE 350			
2	EA	GUARDRAIL ANCHOR UNITS, TYPE M-350			
500	M	REMOVE EXISTING GUARDRAIL			
110.49	M	TEMPORARY STEEL BM GUARDRAIL			
2	EA	GUARDRAIL ANCHOR UNITS, TYPE 350 TEMPORARY			
15,754.7	M	DOUBLE FACED CABLE GUIDERAIL			
66	EA	CABLE GUIDERAIL ANCHOR UNITS			
34,400	M	WOVEN WIRE FENCE, 1200MM FABRIC			
7,500	EA	100MM TIMBER FENCE POSTS, 2.30M LONG			
1,340	EA	125MM TIMBER FENCE POSTS, 2.50M LONG			
100	M	CHAIN LINK FENCE, 1200MM FABRIC			
30	EA	METAL LINE POSTS FOR 1200MM CHAIN LINK FENCE			
3	EA	METAL TERMINAL POSTS FOR 1200MM CHAIN LINK FENCE			
23,000	M	ADDITIONAL BARBED WIRE			
1	EA	DOUBLE GATES, *****MM HIGH, *****MM WIDE, *****MM OPENING (1200MM, 4000MM, 8000MM)			
1,700	MTN	PLAIN RIP RAP, CLASS I			
400	MTN	PLAIN RIP RAP, CLASS A			
3,900	MTN	PLAIN RIP RAP, CLASS B			

			2	EA	***X***X***MM PERFORATED CS PIPE TEE RISER, 1.63MM THICK (600MM X 600MM X 600MM)
30	EA	FLEXIBLE DELINEATORS (YELLOW & RED)	2	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (800MM X 800MM X 800MM)
6	EA	OBJECT MARKERS (END OF ROAD)	1	EA	***X ***X***MM PERFORATED CS PIPE TEE RISER, 2.01MM THICK (900MM X 900MM X 900MM)
28	EA	OBJECT MARKERS (TYPE **) (3)	400	M3	STILLING BASINS
717	MTN	FOUNDATION CONDITIONING MATE- RIAL,, UTILITIES CLASS ***** (IV)	234.5	HA	SEEDING & MULCHING
717	MTN	BEDDING MATERIAL, UTILITIES CLASS ***** (IV)	141.5	HA	MOWING
122	MTN	PAVEMENT REPAIR FOR UTILITY WORK	3,050	KG	SEED FOR REPAIR SEEDING
201.6	M	***MM DI WATER PIPE, CLASS ***** WP (100MM, CL 50, 2.41MPA WP)	10	MTN	FERTILIZER FOR REPAIR SEEDING
1,301.3	M	***MM DI WATER PIPE, CLASS ***** WP (250MM, CL 50, 2.41MPA WP)	6,575	KG	SEED FOR SUPPLEMENTAL SEEDING
145.4	M	20MM COPPER WATER PIPE, TYPE K	394.5	MTN	FERTILIZER TOPDRESSING
980.5	M	150MM PVC WATER PIPE, SDR 21, 1.38MPA WP	3.11	HA	SPECIALIZED SEEDING UNDER GUIDERAIL & GUARDRAIL (CENTI- PEDE)
41.7	M	200MM PVC WATER PIPE, SDR 21, 1.38MPA WP	85	M	IMPERVIOUS DIKE
1,745.3	M	250MM PVC WATER PIPE, SDR 21, 1.38MPA WP	125	HR	SPECIALIZED HAND MOWING
1,106	M	300MM PVC WATER PIPE, SDR 21, 1.38MPA WP	56	EA	RESPONSE FOR EROSION CONTROL
3,449.8	KG	DUCTILE IRON WATER PIPE FIT- TINGS, 1.72MPA MIN WP	1,335	M3	CULVERT DIVERSION CHANNEL
2	EA	20MM CORPORATION STOP	11	HA	REFORESTATION
2	EA	***MM GATE VALVE & VALVE BOX, ****MPA WP (100MM, 1.38MPA WP)	0.52	HA	STREAMBANK REFORESTATION
15	EA	150MM GATE VALVE & VALVE BOX, 1.38MPA WP	40	EA	GENERIC EROSION CONTROL ITEM ROOT WADS
1	EA	200MM GATE VALVE & VALVE BOX, ****MPA WP (1.38MPA WP)	135	M	SIGNAL CABLE
15	EA	250MM GATE VALVE & VALVE BOX, ****MPA WP (1.38MPA WP)	5	EA	VEHICLE SIGNAL HEAD (300MM, 3 SECTION)
7	EA	300MM GATE VALVE & VALVE BOX, ****MPA WP (1.38MPA)	1	EA	VEHICLE SIGNAL HEAD (300MM, 5 SECTION)
1	EA	*** X ***MM TAPPING SADDLE (250MM X 20MM)	135	M	MESSENGER CABLE (9.52MM)
2	EA	300MM TRANSITION COUPLING, ***** (PVC TO AC)	130	M	TRENCHING (UNPAVED)
2	EA	RELOCATE EXISTING WATER METER	4	EA	WOOD POLE
6	EA	RELOCATE EXISTING FIRE HYDRANT	8	EA	GUY ASSEMBLY
974	M	FILL OR REMOVE ABANDONED 300MM PIPE, ***** (AC WATER)	1	EA	25MM RISER WITH WEATHERHEAD
76	M	450MM STEEL ENCASMENT PIPE, ***MM THICK, BY BORING & JACKING (8MM)	3	EA	50MM RISER WITH WEATHERHEAD
110	M	600MM STEEL ENCASMENT PIPE, ***MM THICK, BY BORING & JACKING (8MM)	100	M	INDUCTIVE LOOP SAWCUT
41	EA	GENERIC UTILITY ITEM 300MM RESTRAINED RETAINER GLAND, 1.72MPA WP	305	M	LEAD-IN CABLE
5,500	M	TEMPORARY SILT FENCE	1	EA	MICROWAVE VEHICLE DETECTOR
1,750	MTN	STONE FOR EROSION CONTROL, CLASS A	85	M	TYPE 2 LEAD-IN CABLE
32,225	MTN	STONE FOR EROSION CONTROL, CLASS B	6	EA	SIGN FOR SIGNALS
12,300	MTN	SEDIMENT CONTROL STONE	1	EA	CONTROLLER WITH CABINET (TYPE 2070L, POLE MOUNTED)
249.5	HA	TEMPORARY MULCHING	3	EA	DETECTOR CHANNEL (TYPE 2070L)
9,850	KG	SEED FOR TEMPORARY SEEDING			
79.25	MTN	FERTILIZER FOR TEMPORARY SEED- ING			
2,605	M	TEMPORARY SLOPE DRAINS			
202	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS			
208,500	M3	SILT EXCAVATION			
16,000	M2	SYNTHETIC ROVING			
13,200	M2	MATting FOR EROSION CONTROL			
7,150	M2	PERMANENT SOIL REINFORCEMENT MAT			
350	M	6.4MM HARDWARE CLOTH			

### CULVERT ITEMS

Lump Sum	LS	CULVERT EXCAVATION, STA ***** (57+00.000-L-)
Lump Sum	LS	CULVERT EXCAVATION, STA ***** (68+33.000-L-)
882	MTN	FOUNDATION CONDITIONING MATER- IAL, BOX CULVERT
1,597	M3	CLASS A CONCRETE (CULVERT)
122,384	KG	REINFORCING STEEL (CULVERT)

### STRUCTURE ITEMS

Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 152+01.036-L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 70+91.154-L- LT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 70+91.154-L-RT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 99+31.540-L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,19+16.856-L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,41+34.347-L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1,62+16.062-L-)

Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (2, 70+91.154-L- RT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (2, 70+91.154-L-LT)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (2,19+16.856-L-)
Lump Sum	LS	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (3,19+16.856-L-)
6,106.1	M2	REINFORCED CONCRETE DECK SLAB
5,396.4	M2	GROOVING BRIDGE FLOORS
985.6	M3	CLASS A CONCRETE (BRIDGE)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** ( 152+01.036-L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** ( 70+91.154-L- LT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** ( 70+91.154-L- RT)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (19+16.856-L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (41+34.347-L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (62+16.062-L-)
Lump Sum	LS	BRIDGE APPROACH SLABS, STATION ***** (99+31.540-L-)
87,620	KG	REINFORCING STEEL (BRIDGE)
7,636	KG	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)
340.1	M	914MM PRESTRESSED CONCRETE GIRDERS
1,249.394	M	1372MM PRESTRESSED CONCRETE GIRDERS
274,400	LS	APPROX ..... KG STRUCTURAL STEEL
3,478.5	M	HP310X79 STEEL PILES
52	EA	STEEL PILE POINTS
814.536	M	CONCRETE BARRIER RAIL
4,529.7	M2	100MM SLOPE PROTECTION
Lump Sum	LS	ELASTOMERIC BEARINGS
Lump Sum	LS	EVAZOTE JOINT SEALS